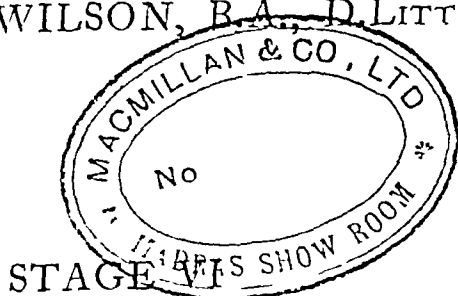




# THE PROGRESS TO GEOGRAPHY

BY

RICHARD WILSON, B.A., D.LITT.



BRITAIN AND THE MODERN  
WORLD

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## PREFACE

IN this concluding volume of *The Progress to Geography* I have tried to select those topics which are of greatest use and interest to a boy who is about to leave the primary school either for work or for a course of higher education. It seemed to me that such a pupil should be required to make a general survey of the world without covering the whole ground or burdening his memory with names and statistics, and, further, that he ought to approach the subject in the following order

- 1 The United Kingdom as the world-centre for British people

- 2 The British Empire as the natural expansion of the British Isles

- 3 The World's Great Powers, of which Britain is one

- 4 The Commercial World, in which Britain and other Powers play such a prominent part, but which also embraces other countries which have no great political power

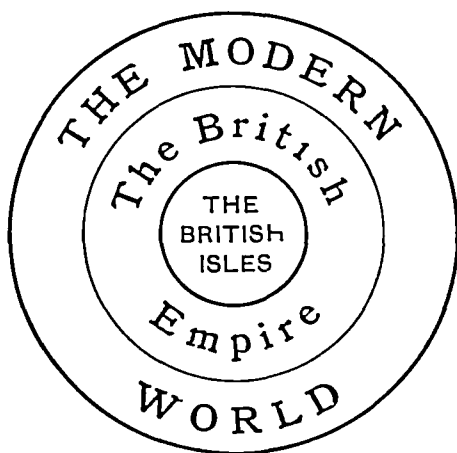
The ground has been partly covered in the preceding volumes of this series. In Stage III I tried to give a very elementary idea of the economic geography of the Mother Country, and found it impossible to do so without continual reference to the Empire, Europe, and the rest of the world. In Stage IV I dealt with the Empire as a whole, and with the Mother Country as the centre of that Confederation. In Stage V I made a general survey of Europe, including the United Kingdom as a very prominent "Continental" nation



## 6 THE PROGRESS TO GEOGRAPHY VI

This course may appear to have covered the work outlined under at least the first three of the above four headings, but the pupil has now come to a stage when he can be interested in other aspects of each of these subjects more suitable to his age and outlook. Besides, my experience as a teacher reminded me very forcibly that at each stage in a school course it is necessary to recall and fix the impressions which have been gained from previous work, and that one of the chief faults of nearly all school schemes in elementary geography is the neglect of the Mother Country after the first stages. We must remember that when a boy or girl is leaving school, he or she is going to make first-hand acquaintance with some part of the work of the Mother Land, which is therefore much more interesting at the moment than any foreign country.

This does not mean, however, that the work of the last year should be confined to a detailed study of the British Isles, but that the pupil's native country should be regarded more or less in its world relations on a progressive plan, which may be shown graphically in the following diagram.



The method of dealing with the Empire in the present book presupposes, of course, some acquaintance with the geography of the Dominions and of India, and it is chiefly directed towards enlarging the pupil's British horizon, so that he becomes a unit, not in an island people, but in an imperial nation, which the Great War served to knit together with stronger bonds than ever.

The teaching of geography during the past generation has made us insular in our outlook, but we must beware lest the "New Geography" makes us imperial in a Prussian sense, and it is the duty of teachers to prevent the conscious or implied use of the British equivalent to *Deutschland über Alles*. This danger has been kept in view in the treatment given to the third section of this present volume, which deals with the Great Powers of the world and some of their chief modern activities.

In the fourth section certain topics are dealt with which are usually omitted in a course of geography dealing with the various continents and countries in order. The whole world is the province of the trader, whose ideal is the "free" port and the open highway, a safe sea, and equality of commercial opportunity, and who is more keenly interested in tolls, canals, pilotage, lighthouses and lightships, winds and currents than in racial jealousies created and fostered by foolish journalists and in political changes.

So far, the unifying power of the various sections of the earth has been racial and governmental. Wherever we have a section of the world's population united in language, ideals, and government, there we have the most satisfactory unit. The region and the climate have made the race in past ages, but now the race is to a great extent independent of the boundaries of the region, and the ordinary citizen looks at the world as made up of "governments" rather than of "natural areas" bounded more or less,

## 8 THE PROGRESS TO GEOGRAPHY VI

but chiefly less, exactly by so-called physical or climatic barriers. This principle has been followed throughout this series, while the study of scientific regional geography and of the mathematical side of the whole subject has been left for a later stage.

It has been found very difficult to deal clearly and correctly with those countries whose territories and activities have been materially affected by the war, partly because the conditions in those countries are not yet stable either politically or commercially. The general attitude has been to draw attention to pre-war conditions and contrast them with those of the present time, and in the case of Europe the teacher is strongly recommended to teach with the old wall-map placed side by side with the new.

# CONTENTS

	PAGE
INTRODUCTION	13

## PART I

### STUDIES IN HOME GEOGRAPHY

RAINFALL AND NATIONAL LIFE	20
ROCKS AND SOIL	27
BRITAIN'S BREAD AND MEAT	37
POPULATION STUDIES	45
GEOGRAPHY AND WAR	53
KING COAL OF BRITAIN	62
THE WORLD'S GREATEST TRADER	69
THE GATEWAYS OF BRITAIN	78
A NATION OF FREEMEN	88

## PART II

### STUDIES IN BRITISH EMPIRE GEOGRAPHY

THE BRITISH WORLD	95
EMPIRE PRODUCTS	103
EMPIRE COMMUNICATIONS	110
SOME EMPIRE CITIES	119
THE BRITISH TRUSTEE	130

# 10 THE PROGRESS TO GEOGRAPHY VI

## PART III

### THE WORLD'S LEADERS

	PAGE
NATIONAL POWER	142
THE UNITED STATES OF AMERICA	150
THE JAPANESE EMPIRE	167
THE CHIEF COUNTRIES OF WESTERN EUROPE	183
MODERN RUSSIA	200
MODERN ITALY	211
CENTRAL AND SOUTH-EASTERN EUROPE	221
THE EXTENSIONS OF THE LEADING NATIONS	230

## PART IV

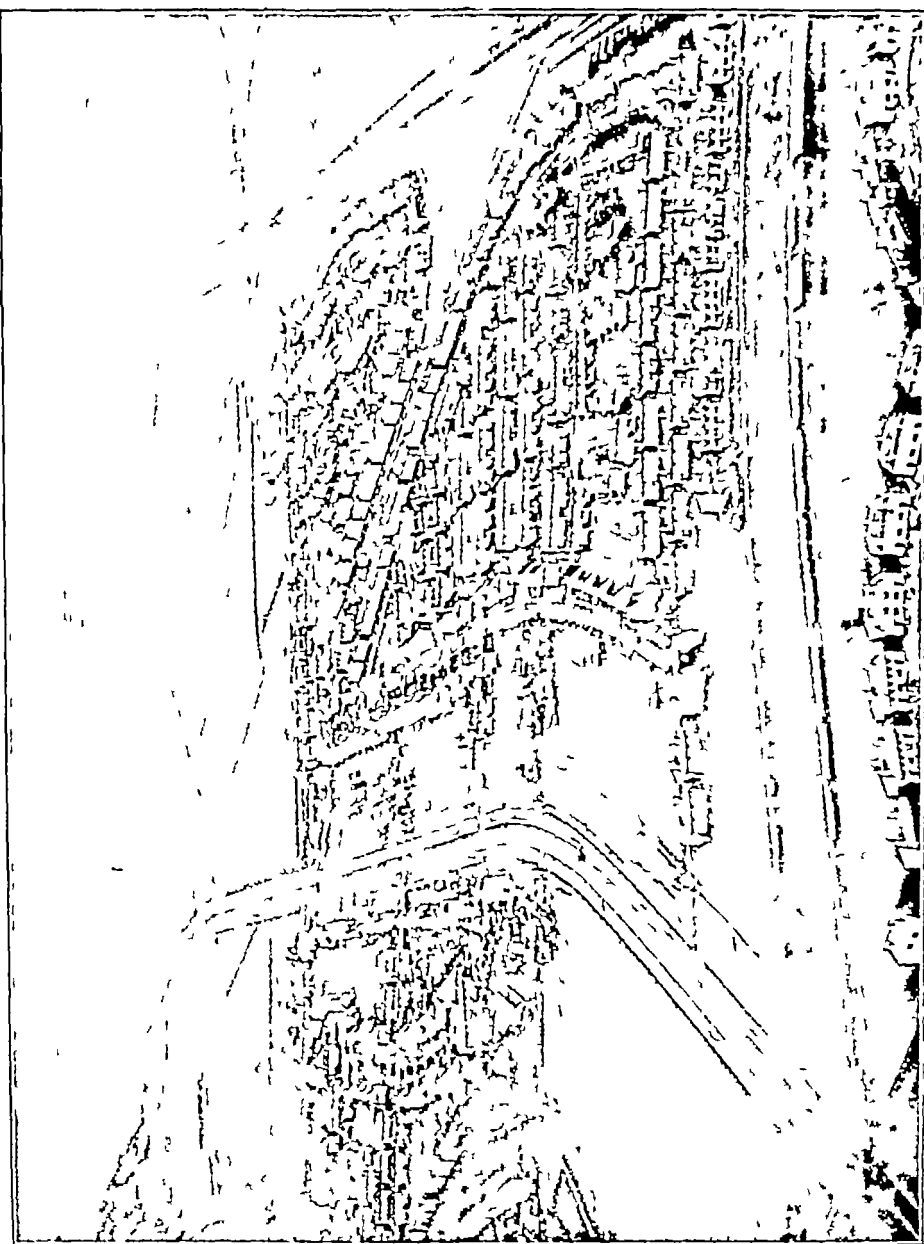
### SOME COMMERCIAL STUDIES

THE LESSER COUNTRIES OF EUROPE	239
TRADING SPHERES AND TRADERS	255
THE CHINESE PEOPLE AND THEIR HOME	260
MEXICO AND CENTRAL AMERICA	275
THE PANAMA CANAL	282
THE SOUTH AMERICAN CONTINENT	290

## APPENDIX

CHIEF ARTICLES IMPORTED INTO BRITAIN FROM FOREIGN AND BRITISH LANDS	312
CHIEF ARTICLES EXPORTED FROM BRITAIN TO FOREIGN AND BRITISH LANDS	313





CORPORATION, TOWN OF ANNING, HOUSTON, TEXAS. (cont'd to p. 10)

# THE PROGRESS TO GEOGRAPHY STAGE VI

## INTRODUCTION

THE subject of this book may appear at first sight to be so wide as to repel the reader—Britain and the Modern World! Everything depends, however, upon the way in which we approach it

The first idea which we must get clearly into our minds is that Britain is keenly interested in *all* that is going on in the modern world. She is not a lonely nation cut from all the others by a “water-walled bulwark,” which, to use the words of Shakespeare, her greatest poet,

“Serves her in the office of a wall,  
Or as a moat defensive to a house  
Against the envy of less happier lands”

She owes more than we can express to her water boundary, but while the seas which wash her shores are a protection, they are also the best possible means of communication. And through all her



## 14 THE PROGRESS TO GEOGRAPHY VI

varied history she has been the centre of world activity, the meaning of the term " world " gradually widening and extending from the time of Columbus to that of Peary and Scott

Having agreed upon this matter, we must decide in what order we are to consider the parts of which the wide world is composed. The old-fashioned way was to divide the land surface of the globe into five continents and to study each in turn. But it is not long before we find out the disadvantages of such a method as this, for the energetic races of the world have never regarded very seriously the dividing lines between these great land masses. The Russians of Europe overflow into Asia. British people are to be found in every continent. Africa is being parcelled out among the peoples of Europe. North America is for the most part held by races which speak the English language, and may indeed be considered as a westward extension of Europe.

A newer and very interesting method is to divide the surface of the earth into regions, separated by natural barriers more real than those which divide some of the continents,<sup>1</sup> each region having more or less of a uniform climate. Under such a division there is, for example, a Baltic region, which includes portions of several separate countries round that land-locked sea, and a Mediterranean region, which takes in not only the southern countries of Europe

<sup>1</sup> The Himalaya Mountains form a much more real barrier than the Mediterranean Sea.

but those of North Africa also. This is, as I have said, an interesting method of division and grouping, and in many ways very helpful, but it is apt to leave a rather confused impression on the mind when a world-survey has been completed, and such a plan obscures the fact that there are certain races of people, each under its own government, which have marked out certain sections of the land surface of the world as their own, paying little or no regard to continental, regional, or climatic boundaries.

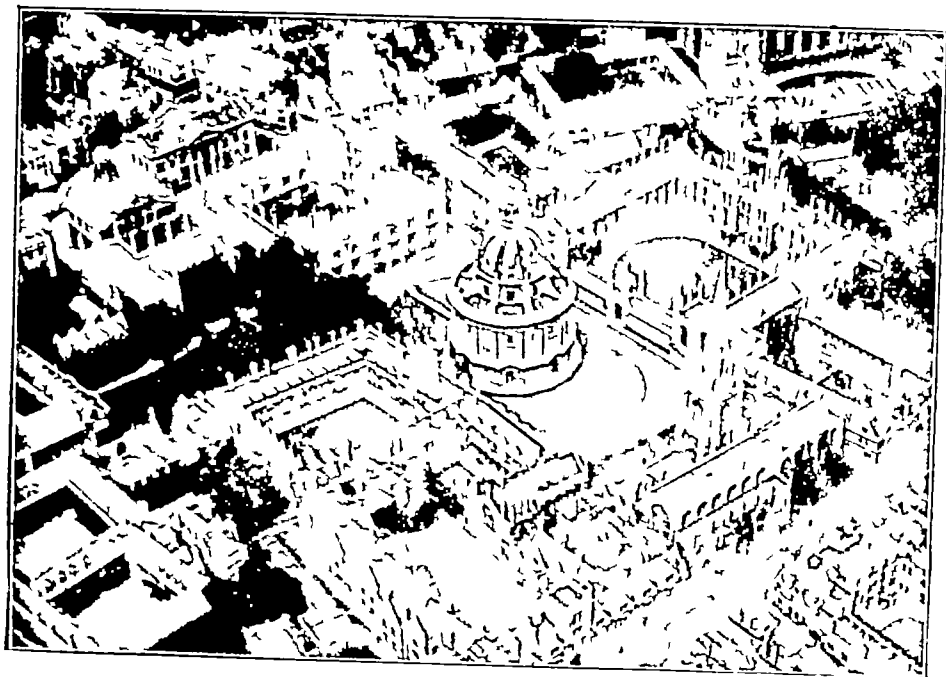
We come, then, to what we might call a racial division of the earth's surface, and to the adoption of a method which makes *the people and its home* the starting-point for consideration. This method also has its drawbacks, but, on the whole, it will help us best at the present stage of our studies to understand to some extent the tremendous activities of the modern world.

Following such a racial division we must naturally begin with our own people and their home, that is to say, with Britain and the British nation. You may say that you have already "done" the United Kingdom in your study of geography. No single person can truly make this claim. Our islands are a little world in themselves, and there is always something new to be learnt about them from a geographical point of view. In the few chapters which immediately follow I intend to draw your attention to some of these new and very interesting matters in connection with our island

home But this is done with the hope of sending you to other and fuller books dealing with the geographical conditions of the United Kingdom, and of leading you to use your holidays and occasional visits to other parts of the country for finding out more about the land which you call "home"

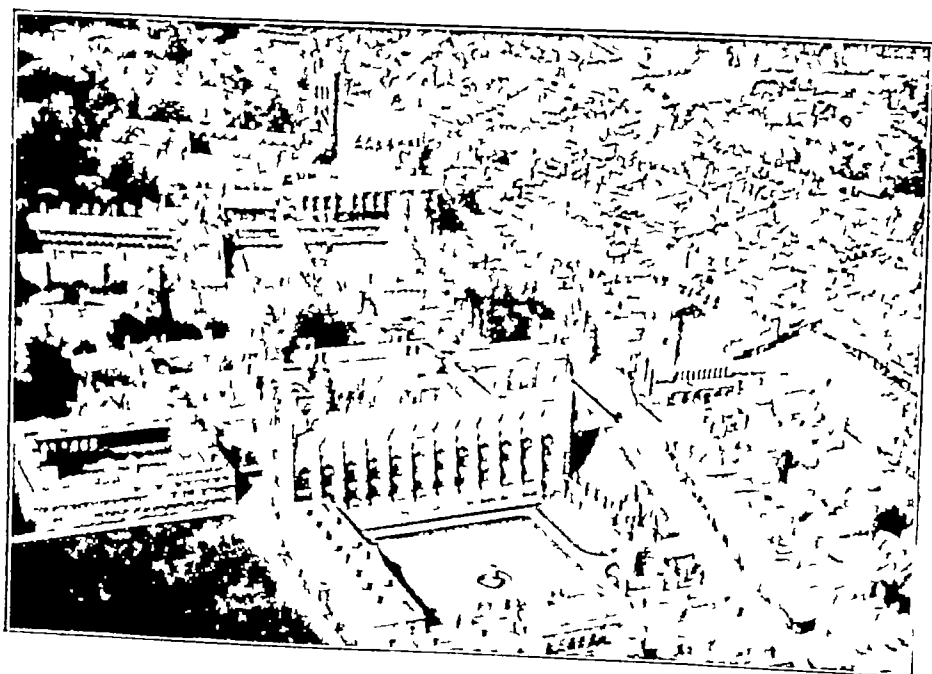
After Britain, what part or parts of the world come next in importance for us? Our friendly neighbour France, which lies so near to our shores? By no means From the rest of the world we must detach those lands which, together with Britain, form the British Commonwealth or Empire, for though they include many varying races, the chief portions are those great "dominions" where other Britons have made homes for themselves, and all the divisions of this Empire, whether peopled by Britons or other races, are united under one flag Once again you may say that you have "done" the British Empire in your geography lessons, and once again I reply that there is no person living who can make that claim Why, it has been very truly said that there is no single person who knows the whole of London!

Our native land is not only the centre of what might be very fitly called the British World It is one of a group which has come to be known as that of the Great Powers, including also the United States, France, Italy, and Japan, and, before the Great War, Russia, Germany, and Austria These countries together form a world in themselves, a



OXFORD

(Central Aero-photo Co)



CAMBRIDGE.

(Central Aero-photo Co)

C

world of progress, wealth, power, energy, restlessness, ambition, mastery, jealousy, and possibilities of the most appalling strife and bloodshed. We must learn, in the next place, something about the homes, the aims and activities, as well as the extensions beyond their own boundaries, of each of these great nations.

Even yet we have not finished with the surface of the globe. There are wide territories inhabited by people who are not subject to the Great Powers, some of them small nationalities of a very interesting and progressive character, others great races in decay. Among these regions are some of the most important parts of the world to the Great Powers, such as the plains of the Argentine in South America, which send to Europe a great deal of the meat and wool required for her people.

Then, again, we are a little too apt to consider our world-survey completed when we have dealt with the *land* surface of the globe, and we forget the importance of the seas and sea passages, the routes for trade, and the points far away from continental masses, which are often of great strategic importance. We must, moreover, clear our minds of such phrases as "the mastery of the seas" and "supreme sea-power," which mean very little when we come to examine them, or have a meaning quite different from that which is usually accepted. The seas are free to all nations beyond the "territorial waters" stretching three miles from any shore. It

is quite a different matter, however, to have such a very strong navy that the shipping of an enemy can be cleared from the sea, as the Allies proved during the first stage of the war with Germany. Many British boys and girls have the very wrong notion that the water all belongs to their own native land!

Such is our programme. It is very large and comprehensive, but I hope to show you that it is quite possible to go through it without making the chapters of this book mere lists of names and columns of figures. Before we begin, however, let me ask you to accustom yourselves to looking at large maps. For myself, I have the greatest difficulty in realising that Holland is only one-fourth the size of England, that seventeen United Kingdoms could be carved out of India, that the whole of Europe could be cut up and packed comfortably within the limits of Australia, that it takes a week to cross North America in a train, and other matters of comparative size and distance. The reason for this is that long years ago when I was at school we studied each country in turn on a separate map without reference to others. Perhaps my own case will act as a "terrible warning" to you, and as an incentive to taking the advice of a great English statesman, who continually advised people to "study large maps". Of course, the smaller maps are necessary for smaller details, but in our review of the world in this present book we shall require always to take the broad view.

## PART I

### STUDIES IN HOME GEOGRAPHY

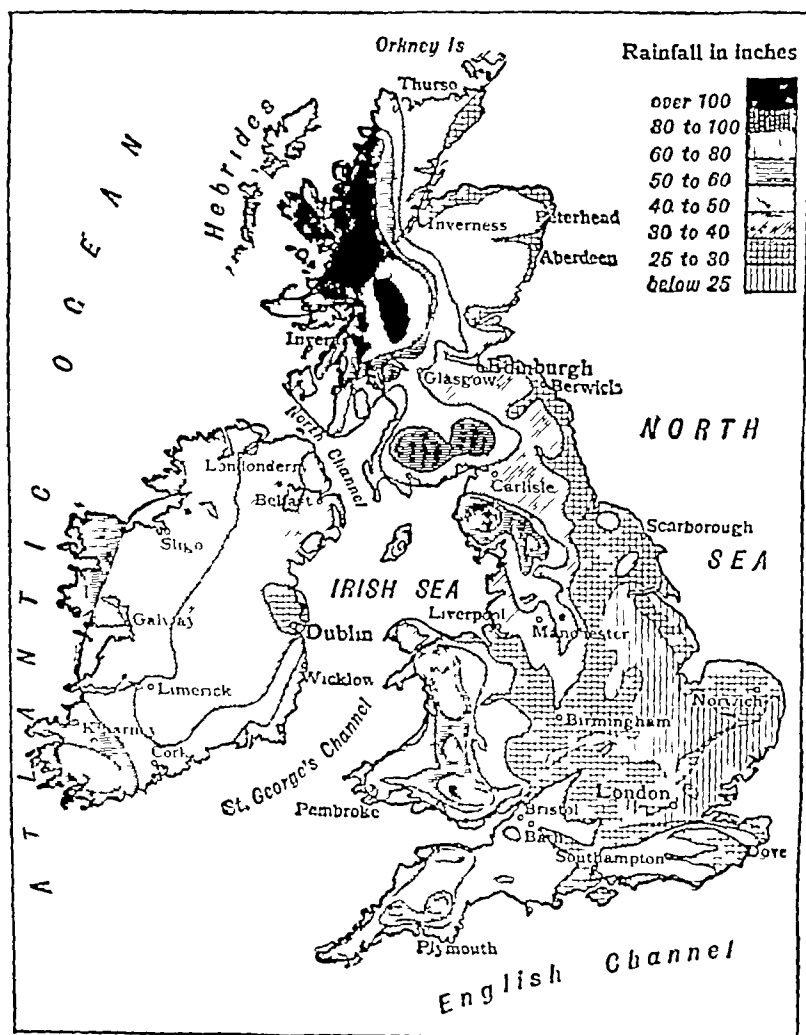
#### RAINFALL AND NATIONAL LIFE

To ordinary people the rain is more or less of a nuisance, associated with umbrellas, mackintoshes, and other unpleasant things. Yet it would not be difficult to prove that the whole life of a nation is dependent upon the rainfall of the land in which it has made its home.

The map on page 21 shows the average amount of yearly rainfall in different parts of the British Isles, and it will repay you to make a more or less close study of its markings. You will, of course, be particularly interested in that part of the country in which you live, and the localities where you have friends or relatives, and you might make a little casual examination of the map from this point of view before settling down to consider the effect of rainfall upon the national life of the British Isles, and consequently upon the British World.

In the first place, it is to be noted that there is no part of these islands which is rainless. The

rainfall is unevenly distributed, as we can readily see, but there are no rainless desert districts. In



BRITISH ISLES. ANNUAL DISTRIBUTION OF RAIN. Walker & Cochrane, 1880.

order to confirm this idea you ought to examine a rainfall map of the world, which you will find in



your atlas, and note those regions which are denied the blessing of rain. While you are examining such a map it would be well for you to note also those parts of the globe which have an excessive rainfall. After considering these matters you will be ready to agree that the rainfall of the British Isles is, on the whole, sufficient. In this matter, as in so many others, we come between two extremes. Severe droughts or floods do not come within our ordinary experience, though it is to be noted and remembered that the prevention of flood and the draining of swamp is one of the first works undertaken by a nation on the way to civilisation and comfort. If the British Isles were left to Mother Nature there would be a great deal of unhealthy dampness in the country, for even the rainfall needs human management, if it is to make its fullest contribution to human needs <sup>1</sup>

In the second place, we can see, without a great deal of close study, that the rainfall of our islands is not evenly distributed, and, without going into closer detail for the moment, we can readily draw the conclusion that more rain falls in the west of our islands than in the east. This general division is determined by two factors—the relief of the land and the predominant or prevailing winds. A reference

<sup>1</sup> The early stories of conflict between heroes and dragons no doubt had their origin in the efforts of great leaders to cope with the terrors of the flood and the unhealthy swamp while the dragon in the mountain caves which guarded the treasures of iron and other minerals was merely the superstitious fear of the dark regions of the underworld whence these treasures could be won by the leader who boldly faced and overcame this fear.

to a physical map will show you that our higher lands are mostly found in the west, but that they do not present a long unbroken chain of mountains, being pierced in Great Britain by considerable gaps or gates, which are very important from the point of view of rainfall, as we shall see. I leave you to determine for yourselves where these gaps are situated.

You may know already that though we have winds at various seasons which blow from all quarters, the predominant or prevailing, or most frequent, winds blow from the south-west and the west over the broad Atlantic Ocean. These comparatively warm winds bring with them much water-vapour collected from the ocean surface, and when they reach the elevated land in the west of our islands they are forced upward and cooled, so that they are no longer able to hold all their water-vapour, the excess of which falls as rain. But, as we have noted, these winds can also pass between the various mountain groups in our western districts into the eastern regions, where they meet with colder currents of air blowing from the east and north-east, which cause rain to fall, though in comparatively smaller quantity than in the western districts. If our mountains presented a solid, unbroken front to the water-laden winds, all the rain would fall on their western slopes, which would be washed by torrential streams, while the eastern part of our islands would be rainless desert districts without rivers and with a comparatively small population.

## 24 THE PROGRESS TO GEOGRAPHY VI

We find, however, that the longer rivers flow from the higher and wetter regions of the west towards the eastern coast, all at least except the Clyde, the Mersey, and the Severn—one for each considerable gap in the western highland ridge, and it would be difficult to exaggerate the effect of this circumstance upon the life of the British nation. It means that the dwellers in this country can enjoy the benefits of an ample rainfall without living in the immediate districts where the heaviest fall occurs, for you will find that the rainiest parts of our islands are, on the whole, farthest removed from the great centres of population. The useful, slow-moving streams fertilise the central and eastern lands, have made rich river-side pastures, are, more or less, useful for transport, and provide suitable sites for harbours near their mouths, while the engineer can now draw upon the lakes and streams in the west to supply water to the crowded populations of the towns in the centre and even in the east. So you see what the heavy rainfall of the Lake District, which so often annoys the holiday-maker, means to the dwellers in the eastern plains.

It is interesting to note, too, that the best holiday districts are exactly in those wettest parts of the country—the Western Highlands of Scotland, the English Lake District, North Wales, the Wye Valley, Dartmoor, and the Killarney Lakes. This is because the rain is the most marvellous of sculptors, and by its continuous action carves the landscape

into beautiful and varied forms. It wears down into fantastic shapes the summits of the mountains and the edges of the crags, fills the gorges with waterfalls and the mountain valleys with foaming streams, moves the soil from place to place, so that the vegetation presents infinite variety, forms the lakes which nestle among the mountains, and cleanses the air from impurities.

We have, so far, only noted the broad division into the wettest and the driest parts of our islands, but the map on page 21 shows certain minor differences which are full of interest, and have great effect upon the life and work of the British people. Passing from the wettest districts, which are the least populous parts of the country, we come to those where the fall is not so great, but is considerably greater than in the most easterly parts of the two islands. One of these is the cotton district in the basin of the Mersey, where the moist atmosphere is of great importance in the spinning of the cotton thread, which could not be done in a dry atmosphere. In these western districts of medium rainfall are also found the green pasture-lands which are necessary for the maintenance of cattle, and on which our best dairy-farms are therefore to be found. In the east, on the other hand, where the rain is scantiest, are the most productive of our wheat-lands, for this cereal thrives best in a drier atmosphere.

The rainfall has, moreover, a decided influence for good upon our winter climate, which is, on the

whole, much milder than that of other countries at the same distance from the equator. This mildness is not due to the sun's rays, but to the warmth stored up in the water-vapour that is carried to our islands from more southerly latitudes of the Atlantic Ocean. When this vapour falls as rain we feel what is known as *rain warmth*, and it is a very common experience in our winter months to find how much milder is the air after a heavy shower. This rain-warmth has had a great deal to do with keeping our coasts free from ice during the winter season, and very little reflection will be required to find out what a difference it would have made to our daily life and habits and our history as a seafaring and colonising people if our ports had been ice-bound for several weeks in the year.

If the water-vapour already mentioned is chilled by any cause below a certain point, it falls, not as rain, but as snow. On the whole, the amount of snow which falls in our islands is small, and it does not lie for more than a few days at a time except in the mountain districts, while a winter rarely passes in the Highlands of Scotland without snow-ploughs being required to clear the northerly railway lines for traffic.

One of the drawbacks to a sufficient supply of rain is the fact that our islands do not enjoy a great deal of sunshine compared with, say, South Africa or Southern France or Spain. A dull grey pall of cloud is much more common than a bright and cloudless

sky, especially in the inland districts, and fogs are frequent over wide areas, including the large towns. The British fog is of two kinds—a sea fog and a land fog. The former is most common on the western coasts in early summer, the latter in the central and eastern districts in late autumn and mid-winter. The blackness of the fog of the large towns is largely the product of the smoke of countless chimneys, and it could be, and is being, decreased by more sensible regulations as to the consumption of smoke, as well as by the greater use of gas stoves and electric light.

I think I have told you enough to lead you to take a broader and more tolerant view of the rainfall not only in your own country but in any other lands in which you may be interested, for what I have said about the rainfall of the British Isles applies also in varying degree to all countries which are peopled by civilised nations. And in each of these countries you will find the occupations and recreations of the people largely influenced by the amount and distribution of the rainfall.

## ROCKS AND SOIL

THERE is a certain science or branch of human knowledge which goes by the name of geology, and which is concerned with the nature of the rocks and other materials that make up the “crust” of the earth, for, according to geologists, the solid ground

on which we live so securely forms a mere outer crust to a mass of molten rock and metal which is slowly cooling from the outside. Now this science of geology tells of the manner and the order in which the various rocks and clays of the earth's surface have been composed. There is room for a good deal of guessing in the matter, and all geologists do not agree on certain important points, but the story of the rocks is one of the most interesting records that have ever been set down.

We have only a limited interest in this story when we come to study geography, which is concerned with *the present condition of the earth's surface as the home of the human race*. But we are dependent upon the geologist for some very valuable help and guidance. We ask him what his subject has to tell us with regard to the building-stone which can be taken from the rocks of a certain district, in which rocks we can expect to find a good water supply, what kind of soil has been weathered down from the rocks, and for what crops it is suitable, whether the rocks contain any of the mineral ores which are so useful in civilised life, and whether the rocks of certain ridges in the path of a proposed railway are of such a kind that they could be easily and safely tunnelled. It is worth noting that in fixing a land boundary between two nations the statesman obtains the help of a geologist, or perhaps more correctly a mineralogist, who gives advice concerning the probable or known mineral

wealth of a certain district on either side of a proposed frontier

Geologists tell us that the oldest rocks were formed by cooling from a molten condition like that of volcanic lava. Among these rocks are found the hard granites which are so useful for building and road-making, and other kinds of hard stone which are used for breaking up into road metal. The surface of these rocks is usually more or less bare of vegetation, and the regions of the oldest rocks are mostly those of our moorlands and mountains in the north-western parts of Britain—the districts, as we have seen, of greatest rainfall and scantiest population, but the places where great water-supplies are stored up.

Next in age to these hard rocks of moorland and mountain are certain rocks which include excellent building-stones as well as the limestone useful in smelting iron. These are found in the upland districts of lower elevation in the centre and west of our islands, the busiest and most populous parts of the country, with the exception of the London area. Associated with these are the coal and iron as well as deposits of other minerals, so that these rock formations are some of the most important of all from the point of view of the geographer. These rocks are mostly very pervious to water, and store up large supplies in their fissures, which issue at certain points as springs. This supply is, however, not sufficient for a big town, and it has been found necessary to go to the regions of older rocks, where





the lakes are found, to obtain water in larger quantities thus Manchester is supplied from Lake Thirlmere in Cumberland, Liverpool from the artificial Lake Vyrnwy in North Wales, Birmingham from the Rhayader Valley in Wales, and so on. In this way the engineer can bring the regions of ancient rock into the service of man.

The geologist tells us that the newest surface formations are the oolite limestone, chalk, clay, and gravel, which are to be found in south-eastern Britain. Oolite limestone gets its name, which means egg-stone, from the fact that it is made up of rounded grains about the size of a pin head, and resembling the roe or eggs of a fish. The oolitic limestones are found in a belt running from the neighbourhood of Portland Bill in a north-easterly direction towards the Wash, and they furnish excellent building-stone, which can be readily shaped with a stone-cutter's saw. In this oolitic belt you will usually find stone walls instead of green hedges between the farmer's fields.

The chalk is one of the most important formations of south-eastern England, and a belt of this earthy limestone runs from beyond Portland Bill right across country in a north-easterly direction to the north coast of Norfolk, and then across the Wash into North Lincoln and East Yorks, as well as through Wiltshire, Sussex, Surrey, and Kent. The surface features associated with the chalk are broad rolling upland downs or wolds, on which large numbers of fine

sheep are fed The chalk also lies under the clays, sands, and gravels of the eastern counties, and in the district round about London forms an underground reservoir for large quantities of excellent though very hard water It contains many flints, which are often used for building purposes, and many of the churches of this part of England have been built of these small hard stones The chalk comes out on the coast to form the white cliffs of Flamborough Head, Spurn Head, Beachy Head, Dover, Folkestone, and other parts

What is known as "London Clay" lies over the chalk in the region occupied by the metropolis and its ring of large towns Here there is not much building-stone, and large quantities of soft yellow bricks are made and used for building Beds of sand and pebbles are also found at various places in this area, and the sandy ground is usually occupied by shrubs and pine-woods so as to form a heath London is surrounded by a ring of these heaths, which are not suitable for cultivation, and are used as parks and recreation grounds for the people of the metropolis, to the great advantage of their health The largest of these is Bagshot Heath in Surrey, and others are Hampstead Heath, quite near to London on the north, and Blackheath to the south-east

It is easy to see how dependent we are upon the building-stone, coal, and other minerals taken from the rocks, and upon the soil which is weathered down from them But there are other gifts of

“Mother Earth,” the value of which we are too apt to overlook, partly because coal takes such a large part in the life of the British people. There are immense chalk-quarries near the mouth of the Thames, and the chalk taken from them is not required for blackboard purposes but for making lime, whiting, and what is known as Portland cement, which contains a great deal of mud from the bed of the Thames. These are very useful things in modern life, and we are now building houses and factories of concrete, which is made from cement, and when dried and hardened provides an excellent substitute for stone. Concrete slabs are also much used for paving footpaths. The cement of which concrete is made is mixed with fine gravel, so that the gravel-beds of south-eastern England as well as the sand deposits have become almost as important as the stone quarries of the west and north.

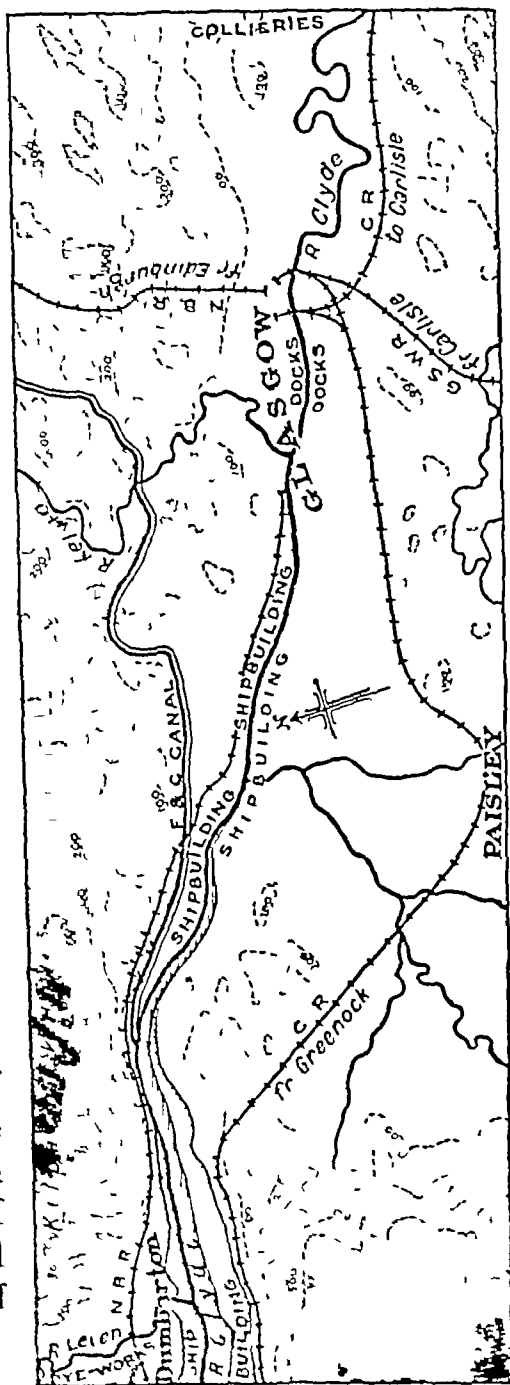
Clay, of course, suggests bricks, but the clays of our country are of several varieties and are put to several different uses. There are in Cornwall, Devon, and Dorset large deposits of china clay and potter's clay, upon which the potteries of Staffordshire very largely depend for their supplies of raw material, which are exported mostly from Fowey in Cornwall. London Clay makes a soft yellow brick, while most of the harder bricks come from the Midlands, and have a great deal of coal ash in their composition. In Northumberland and several other districts a special kind of clay is found, which is used for making

firebricks, drain-pipes, and tiles. This fireclay is also being made into blocks, which are used as a substitute for building-stone. Near Redhill in Surrey, as well as near Bath, there are very valuable beds of fuller's-earth, a kind of soapy clay which is used in cloth-making for extracting grease from the wool, as well as for general cleaning purposes.

One of the most important of all the products of the rocks is salt, and in taking stock of the resources of any country the geographer would do well to consider very early how far it is provided with this indispensable mineral. Most of our salt, of which we have a great quantity, comes from Cheshire and Staffordshire, a great deal also from Lancashire and lesser quantities from Durham and Worcester. The Cheshire salt occurs in great beds of rock, and has been mined in this district for many centuries. There are also many brine-springs, from the water of which the salt is taken by means of evaporation. We are too apt, as I have said, to overlook the value of our salt deposits in taking stock of our coal and iron.

A very important mineral substance in the present day in which the United Kingdom is lacking is mineral oil. There are in southern Scotland many deposits of a kind of slaty rock called shale, from some varieties of which a great deal of paraffin oil can be produced. But for the most part we are obliged to import our supplies of petroleum in its various forms from America, south-eastern Asia,

and Russia. There are, moreover, many mineral substances taken from the ground which can be used to fertilise the soil for the production of food crops. One of these is potash or phosphate of lime, which occurs in certain rocks and is very valuable as a manure for land in which cereal crops are to be grown, these plants accumulate this substance in their seeds, and the bones of the human system as well as those of animals are largely composed of phosphate of lime. Ground bones form one of



THE CLADI NEAR GLASGOW (Scale—3 miles to an inch)

Contour lines at intervals of 100 feet up to 300 feet above sea level above that, at intervals of 300 feet

the most valuable of fertilisers, owing to the presence of this mineral. Now Britain is obliged to import huge quantities of bones every year in order to fertilise her soil, which has been worked so long for the production of food. She also imports phosphates in huge quantities from Chile in South America, while Germany counts as one of her most valuable mineral possessions immense phosphate beds which lie in the neighbourhood of Stassfurt. Britain has, however, as we have seen, large quantities of other lime substances which are often added to the soil in order to supply plant food.

Ireland has very little coal and must import this mineral from Great Britain, but she has extensive beds of peat, which is used as fuel by the country-people. Peat is a kind of fibrous soil formed by the accumulation in past ages of remains of mosses and other marsh plants, and it is usually obtained in those parts of the world where the rainfall is abundant and the drainage of the land is more or less defective. Peat lands when drained and fertilised with lime produce excellent crops, and many of the farms of Great Britain are situated on what was originally peat soil. When dried, peat forms a good slow-burning or smouldering fuel, and it can be made still better for quick burning by severe compression, which converts it into a kind of soft brown coal.

You see, then, that there are very many things in the rocks which are of enormous value to man.

besides the obvious building-stone, coal, and iron I hope that this chapter has set your minds working as to the useful substances which can be got from the rocks near your own home, and the way in which these materials can be used in the service of man. Remember also that I am writing of the rocks of Britain as an example of the rocks of other parts of the world, for they are all of a somewhat similar character and formation.

## BRITAIN'S BREAD AND MEAT

THE British Isles lie almost in the mathematical centre of the land surface of the globe as well as in the centre of all the seas. It is therefore not surprising to find that all her daily work is more or less concerned with the outside world. Wherever there is modern activity in any part of the globe, there we find the British trader or financier, the British sailor or British captain with a native crew, British coal and manufactured goods, with the British fleet within easy wireless call to protect British interests and uphold British honour.

Other countries may strive to make themselves "self-contained," that is, to grow all or nearly all of their own food, to produce their own clothing, and materials for war munitions. Owing to her



size Britain can never do this, even if she wished to do it. Her ideal is a free and open world with opportunities for all, and constant exchange between countries which possess varying resources or have specialised and won a reputation for the manufacture of a certain class of goods. One country has supplies and opportunities which another lacks, and if each attends carefully to its own business, the chances are that the best possible class of goods will be produced all round. Moreover, this variety of products among the varying nations means more and more ocean-carrying trade, in which Britain is an adept.

Let us look into some of the modern activities of the people of the British Isles and see how they are constantly considering, indeed are constantly being forced to consider, the outside world either as a source of supply or as a market for the sale of their own goods. In early days our country was at the very edge of civilisation, but she is now at the very heart of it, and as in the olden days all roads led to Rome, we may now truly say that all routes by sea or land lead to London.

Britain grows wheat, barley, oats, and other cereals, and the various parts of the kingdom share in this work, Scotland taking the lead in the production *per acre* of wheat, Ireland in barley and oats<sup>1</sup>

<sup>1</sup> Note that I am not here comparing the relative quantity raised over the whole country, but what might be called the 'intensity' of the crop, i.e. the production *per acre*—a much better comparison.

The grain raised is of excellent quality, and British modern farming is of the best, but the quantity raised is ridiculously small when we consider the requirements of the population. For this first necessity of life we find the British people looking beyond their sea-girt border; and apart from the grain required to feed her own people, we have seen that our country must also look to Chile in South America and other parts of the New World for the fertilisers or manures which will supply the potash necessary for a good yield of grain. In the production of wheat before the war the United Kingdom ranked with Bulgaria and with Austria apart from Hungary, while Rumania, another small Balkan state, was far ahead of her.

The greater wheat-growing regions, therefore, become at once places of almost painful interest to Britain, and it is not surprising that every effort has been made, and is now being made, to render the British states beyond the seas prolific sources of supply for the staff of life. When we look down the table of wheat returns we find with relief that Canada is among the leading wheat-growing countries, and that her great activity in this respect allows for the export of enormous quantities of this grain of first-class quality. We see also that Australia has almost as much land under wheat as Canada, and that India grows enormous quantities, but we cannot rely upon these two sources, for Australia may be visited by drought, or India threatened with

famine, when the export of wheat to Britain would in each case be prohibited

Before the war Russia led the way in the production of wheat, a great deal of which was exported, but this grain was on the whole not of first quality. Besides, Russia needed an enormous quantity for herself, and she was not very well organised for its transport to the coast or shipment to other lands. The war and its results removed Russia from the wheat market, but it could not wipe out the possibilities of the country as a world granary, and when the country recovers itself we shall doubtless find it taking a leading part in the production and export of the grain which is used so largely in all civilised countries.

The United States came next in order, and, though she requires enormous quantities of grain for herself, she has a great deal of flour for export. France, Italy, Germany, and Hungary stood high in the list, but their wheat was required mainly for their own people, though Hungarian flour found its way to our provision shops in large quantities. Next in the list came Argentina, which has rapidly become a source of wheat supply, but it is interesting to notice that the yield per acre of this grain in Britain is six times that of the Argentine, which suffers greatly from lack of moisture. This matter of yield per acre is a good test of farming efficiency, as you will readily acknowledge. Tunis in North Africa, which could scarcely be called an up-to-date country, has as

much land under wheat as we have, but the yield *per acre* is about one-fifteenth of that of our own country

I have no space to follow out in similar detail the world's supply of barley and oats, but we might test the farmer's efficiency in the production of the latter very useful grain as well as the comparative fertility of the soil under the crop. Holland leads the way in this matter, though the area under oats is only about equal to that of our county of Cambridge. Germany, Britain, and Switzerland are about equal in the yield per acre. Russia had an enormous area under oats, but the comparative yield was only about half that of Britain. The Argentine crop is heavy, but has only one-third the "intensity" of our own.

In the matter of meat—a *very* important matter to all Britons—our country is almost as anxiously concerned<sup>1</sup> with those parts of the world where sheep, cattle, pigs, and fowls can be fed in large enough numbers for export. We feed and slaughter a large number of cattle, sheep, and pigs, and the meat thereby provided is on the whole of the best possible quality, but practically all this food is kept within our own borders, where it supplies only a portion of the population who can afford to pay a high price for good quality. For the rest we must look

<sup>1</sup> Three fifths of the meat eaten in this country is home-grown and the import of pork, bacon, and hams is about equal to the home production in ordinary times.

beyond our own borders, and the large and profitable market for meat in the United Kingdom has encouraged stock-farming in many other parts of the world, including the oversea portions of the British Empire. Australia and New Zealand come at once into our minds in this connection, though the sheep-runs of these two countries were originally started to supply not meat but wool to the Mother Country, and for a long time the sheep not needed for home consumption were boiled down to make tallow. This was done, of course, before the chilling or freezing process was discovered.

On the whole, however, the Empire contribution of meat is mostly mutton, and we must look elsewhere for outside supplies of beef. For the most part this meat comes to us from America, both from the United States and the broad plains of the Argentine and other South American republics. Britain takes by far the largest share of the frozen meat, as well as the live animals for slaughter, sent out from the ports of Argentina and Uruguay, and has a special treaty arrangement with the Argentine, under which she is the "most favoured nation." This treaty is nearly a hundred years old, and its existence is a proof of foresight on the part of those who concluded it, when we think of our short home food supplies, and our own national inability in this all-important matter. The amount of fresh beef and the number of cattle sent to us from the United States is not large, but a great deal of canned beef

and other food preparations comes to us from that country, which does much more business with us than with any other nation



1911  
SORTING AND BALING WOOL NEWMARKET AUSTRALIA

The United States, however, sends to us enormous quantities of bacon, hams, and lard, forming our chief outside source of supply of these foods. We also look across the North Sea, and especially to Denmark

## 44 THE PROGRESS TO GEOGRAPHY VI

and, before the war, Russia, for bacon. The bacon of Russia was not of such high quality as that of Britain or Denmark or even America, but the industry was improving in efficiency, and the wide forest-lands of this great country provide capital feeding-grounds for enormous numbers of bacon hogs.

Of course, for an obvious reason, we must depend upon ourselves in the matter of milk supply, which is in Britain fairly constant and comparatively cheap, though quickness of communication and methods of preparation may in the future cause us to take a keen personal interest in the foreign supply of this very useful food. We are also concerned in the numerous small cattle fed on the Alpine slopes of Switzerland, for a great deal of condensed milk is made in that country, as well as milk-powder, which is used in food for invalids, and during the war with Germany these supplies were for a time seriously affected, while the occupation of that country by Germany or Austria would probably have resulted in an immediate rise of our fresh-milk prices owing to the shutting-off of supplies of the condensed variety.

You see, then, how very closely we are concerned with the fortunes of the farmers of Canada, the United States, and other parts of the world, and why it is that our weekly bills may be so easily affected by a bad harvest, a drought, or a serious flood in some remote part of the globe, how an

outbreak of cattle- or sheep-disease on the other side of the world might prove a very important and serious matter for us, and how we are directly concerned in the task of the scientist who works at an up-to-date bacon factory, say somewhere in Chicago or in Denmark, making it his daily business to find out whether the hogs are quite free from worms. We can easily feel, too, the effects of an American hurricane at our quiet breakfast-tables in England.

## POPULATION STUDIES

THE census is taken in the United Kingdom once in ten years, and the numbers arrived at represent the population of the country on a certain day in a certain year. "They include all people in houses or buildings, travelling on the roads in sheds or caravans, afloat in ports or arriving on the day of enumeration. They do not include either fishermen or sailors or the army abroad. The census affords an instantaneous picture of the number of persons where they happened to be, without reference to their ordinary place of living or livelihood. The date, however, is so chosen that few people are away for pleasure, and not many on business, so that the great majority are allotted to their ordinary place of business"<sup>1</sup>. What would have happened to

<sup>1</sup> Professor A. L. Bowley



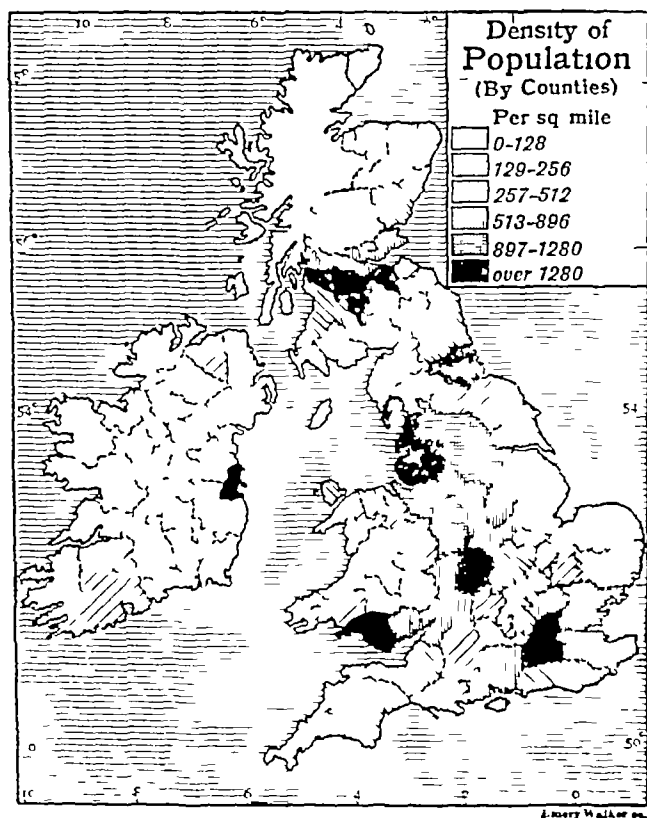
Census Day if it had fallen during the time of the fight with Germany, which began in 1914, instead of in 1921?

Before this war the population of the United Kingdom was returned at about 45.4 millions, so that we stood fifth in order of population, following Russia, the United States, Germany, and Japan in this order, the first-named country having about 2.5 times the population of our own land. The census returns of 1921 showed that the population of the United Kingdom had increased by about two millions.

This number, if evenly distributed, would give an average population of 390 per square mile of area, but very little observation is required to show us that the population of our country is by no means evenly distributed, but is massed together in certain portions of the land, scattered more or less thinly in other districts, and almost entirely absent in others. It is interesting to note at the outset how the population is divided among the various countries of the British Isles. Taking the numbers in round millions, the arrangement is: England, 35.7, Wales, 2.2, Scotland, 4.9, and Ireland, 4.4, while London, including what is known as "Greater London," that is, its surrounding ring of towns, accounted for 7.5.

A population map of a modern nation is a thing of patches, as you can see by reference to that of our own country on page 47. The key to the

puzzle is found in a knowledge of physical features and geology or mineralogy. On the whole, the denser population patches are found in the lowlands within more or less easy reach of the sea, and on or



BRITISH ISLES DENSITY OF POPULATION

near the great coalfields, though the London patch is our great exception to the mastery of the minerals. In fact, the population map of the British Isles is a guide to the relief of the country as well as a guide to the situation of the coal measures, London again

## 46 THE PROGRESS TO GEOGRAPHY VI

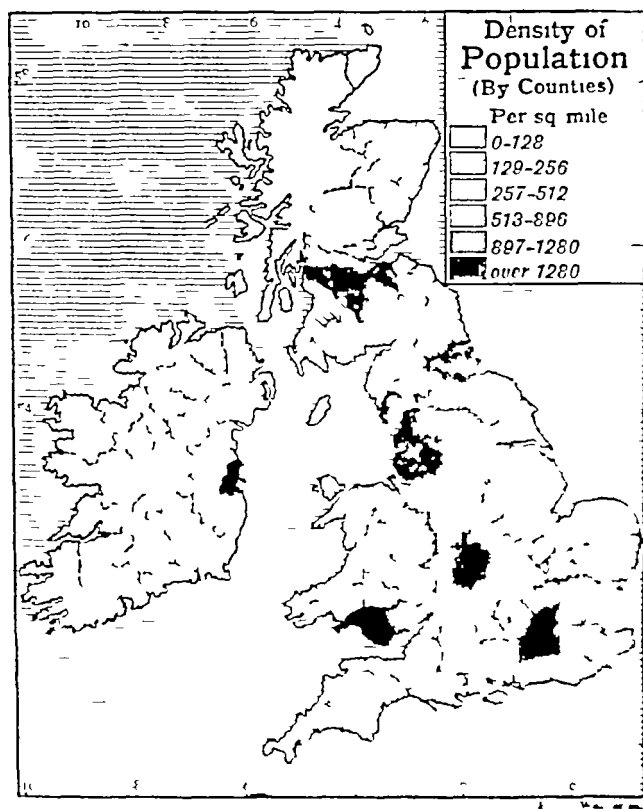
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excepted as well as the Belfast area, which gets most of its coal from Scotland and north-western England. In vivid contrast to these denser patches are the Highlands and the middle Lowlands of Scotland, the English Lake District, the Pennine moorlands, the mountains of Wales and Ireland, while between these two extremes lie the rural districts, where the population is, from the nature of human occupation, scattered and thin.

With regard to the great towns, we must beware of thinking that it was the presence of the coal and iron which fixed all their sites in the first instance. As we have seen, London is not connected with a coalfield. The great industry of Lancashire was fixed in that particular part of the country before the coalfields were worked as they are now, owing to the presence of copious water-power and the humidity in the air which was favourable to the manufacture of cotton cloth. It is true that the coal was the cause of a wonderful expansion of many villages into towns and towns into cities during the eighteenth century, and modern industry is so organised that it is largely dependent upon the coal. But we must beware of taking this all-important mineral as the sole guide in our study of the population map.

In England and Wales before the war 78 per cent of the people lived in towns and the rest in the country districts, while about one out of every five people in the country lived in London. Only half

the people whose names were entered on the census papers of 1911 were returned as workers, and of these more than half were engaged in the factories, mines, and workshops, but only one-fifteenth in farming and gardening, and about twice as many in commerce, that is, in distributing the things made in the works and factories, and the coal taken from the mines. More than half of the people of Scotland were engaged in the mines, factories, and shipyards, and the division of population between town and country was similar to that in England. In Ireland one-fifth of the people were engaged in agriculture, and the ratio of the town and country population was the reverse of that in England and Wales.

A study of these numbers impresses upon us the importance of the town in the United Kingdom and, incidentally, the importance of the means of bringing across the seas the supplies of food which the country cannot produce for itself, that is to say, the British mercantile fleet and the Royal Navy. The position of our towns is therefore a matter of deep interest to us, and of great geographical significance. To the thoughtful student of geography the most interesting question with regard to a town is 'Why is the place fixed in this particular locality rather than some miles away?' The finding of the answer often takes us back to very early days; but even to-day we ought to know very definitely what it was that fixed the position of his or her native place and

far its site, which was most probably determined long, long ago, is a help or a hindrance to its present activity and prosperity

Matters of water-supply, defence, shelter, convenience of communication, or access to the sea all played their part in determining the sites of towns in days gone by, while smaller places arose owing to their nearness to larger centres of occupation, especially those which were provided with means of refuge and defence in the shape of a castle. In the case of each town with a long history there is some underlying reason of this character which can be discovered by those who take the trouble to search for it. Each ancient town has an individuality which it is difficult to destroy, and there are not many instances of the removal of a town of this kind from one site to another. One of the most interesting English cases of this kind is that of Salisbury, which once occupied a site on higher ground and away from a convenient water-supply. This ancient place is now known as Old Sarum, and consists only of a large mound and a few ruins.

Towns whose sites were fixed by the junction of main roads in the olden days have naturally become in many cases important railway centres, for the railroad, like the older type of road, must follow the river valley, and the straightest, most level track across the low-lying country. Towns of this class are now assuming additional importance as road centres owing to the extended use of the motor-car,

and when we get special motor tracks in all parts of the country they will possibly run together in these towns, which will doubtless also have their aerodromes in the near future



SALISBURY

It is not only the site of the large centre of this kind which is of interest to the geographer. The smaller towns and even the villages were placed where they stand for some definite reason.

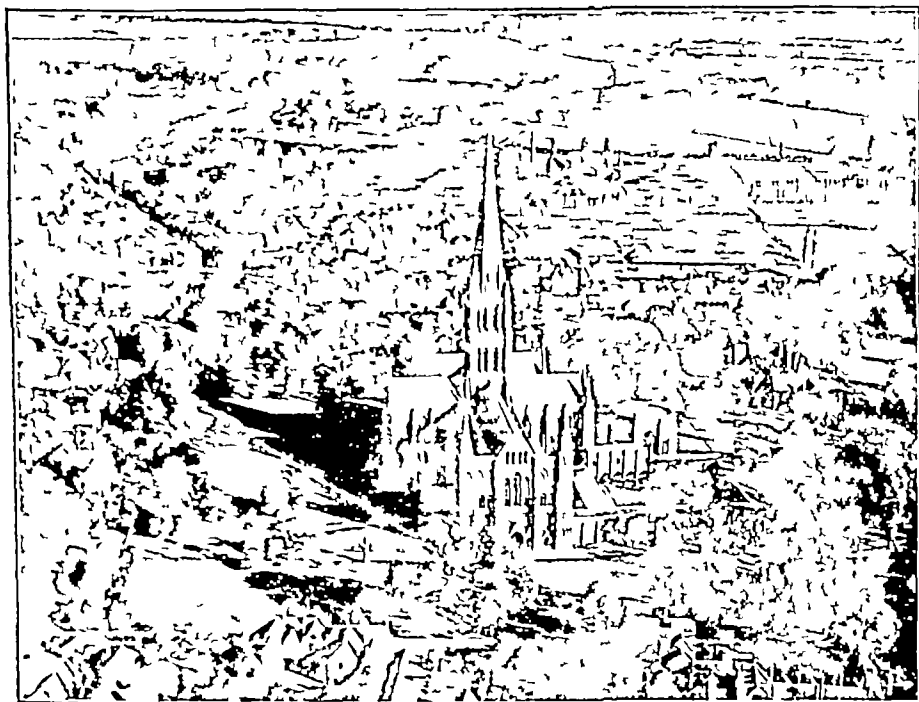


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SALISBURY

*[Central Aerophoto Co]*

It is not only the site of the large centre of this kind which is of interest to the geographer. The smaller towns and even the villages were placed where they stand for some definite reason, and if the reader lives in or habitually visits one of these places, it will be well for him to make a few observations and inquiries into this matter of locality. Let

him look for a ford or a bridge over a stream , for an old well or some other supply of drinking water , for a mine or quarry in the neighbourhood , for the intersection of two main roads or river valleys , or for the beginning of a path through a range of hills or across a moorland . It will often be possible to obtain a good clue by inquiring into the meaning of the name of the place, taking care to obtain the best information on this matter and to avoid following a hasty interpretation . The milestones near the town or village will help to fix its locality with regard to other larger places as well as the railway or railways which run from or near to it . A few occasional inquiries as to the kind of goods traffic which passes through a station is always helpful to a student of geography .

There is nothing more fascinating than this locality study with the help of a good map, as every Boy Scout will readily testify, and the one-inch Ordnance sheet of your own district ought to be as well known to you as, I hope and expect, your Bible is . There is a good reason for the presence and the direction of every road, highway, and footpath in your own immediate district , and if you know your own little world in this respect you will be all the better prepared to find your way about the wider world when you wish to do so at a later date .

## GEOGRAPHY AND WAR

THE outbreak of war with Germany in 1914 had the effect of making British people study maps in a way which they had never done quite so carefully before, and the connection of war with geography was very strongly emphasised. Ordinary people learnt the value of geographical features from the point of view of the strategist, and saw that in spite of all the wonderful inventions of science in all its branches the hill range, the river valley, the mountain pass, the forest, and the swamp had a great deal to do with the safety of a nation. This did not apply only to France and Belgium, to Austria and East Prussia, but also to the so-called "tight little island" of Britain, for the fear of invasion made the physical features of the United Kingdom much more interesting than they had been when their names were learnt, rather unwillingly, at school.

In studying what has come to be called strategic geography we have to consider lines of advance, impediments, and objectives. When a general seeks to move large masses of men he tries to find the easiest path which contains the fewest obstacles to his advance towards his objective, that is, the town or fortress or position which it is his duty to capture, the chief objective in invasion in force being the capital of the invaded country. The duty of the defender is to block the line of advance at critical

points, to raise as many difficult obstacles as possible, and, in the final event, to take up the best naturally advantageous position for defending the town, fortress, or hill which is in danger of capture

So long as fighting is done on the ground, the line of progress of an army in an enemy country will always be over good roads in open country, which are usually to be found in river valleys. These river valleys must, however, be broad and open, not narrow gorges which could be commanded by comparatively few men on the heights above. Critical points in a line of advance would be a single bridge over a river, a mountain pass, a causeway across a marsh, or a pathway through a forest, and the aim of the defenders would be to concentrate their attack upon these points. It was in order to follow out these ideas that the German generals chose to enter France by the Belgian plain rather than through the wooded region of the Ardennes, and then took the path by the river valley of the Marne in their advance upon Paris. The Belgian way offered the easiest line of advance, with fewest obstacles towards the chief or at least the first objective, which was Paris, the "heart" of the country.

The chief impediments to an advance are the river, the forest, the elevated country, the desert, and the swamp. None of these ever prevented an army from advancing except for a time, but each gives opportunity for the defenders to rally their

forces and to check the advance for a longer or shorter period. No impediment is permanent, especially in these days of military engineering and scientific invention. The river can be bridged in a few hours or at the worst swum across, or boats can be hastily put together by the advancing force. The forest is a serious check, and is always rigidly avoided by a wise leader on account of the cover it affords to small parties of defenders, who could hold up very large bodies of troops compelled to take such a path. A circle of tangled forest would be worth many iron forts as a means of defence. But one of the first praiseworthy acts of advancing civilisation has always been to clear away the forest.

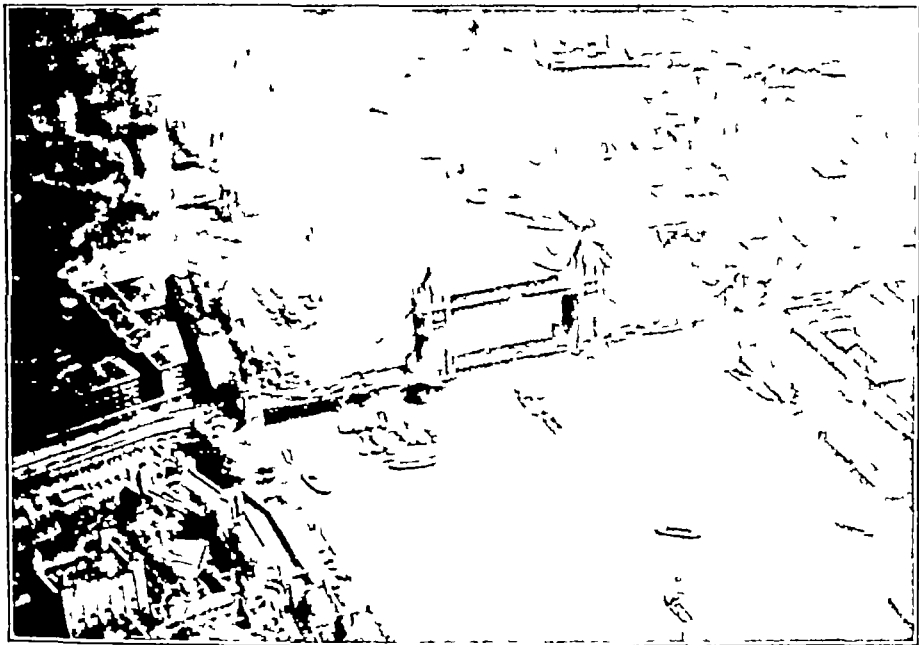
"There are very few men, indeed," said a geographer,<sup>1</sup> "who have been several miles across wooded country without a road or a path. If you try to get through the Ardennes country, for instance, from the valley of the Meuse to the valley of the Semois, leaving the roads, you will not progress at much more than one mile an hour. Underwood, undergrowth, loss of one's way, lack of any provisions, or people, hundreds of other conditions, make the Forest a serious obstacle, and in practice, with the exception of certain types of clear and sparse woods—and even then for any force except cavalry—forest condemns an army to the defiles of its few roads."

While the hill country provides a serious impediment

<sup>1</sup> Mr Hilaire Belloc in a lecture before the Royal Geographical Society, November 9 1914

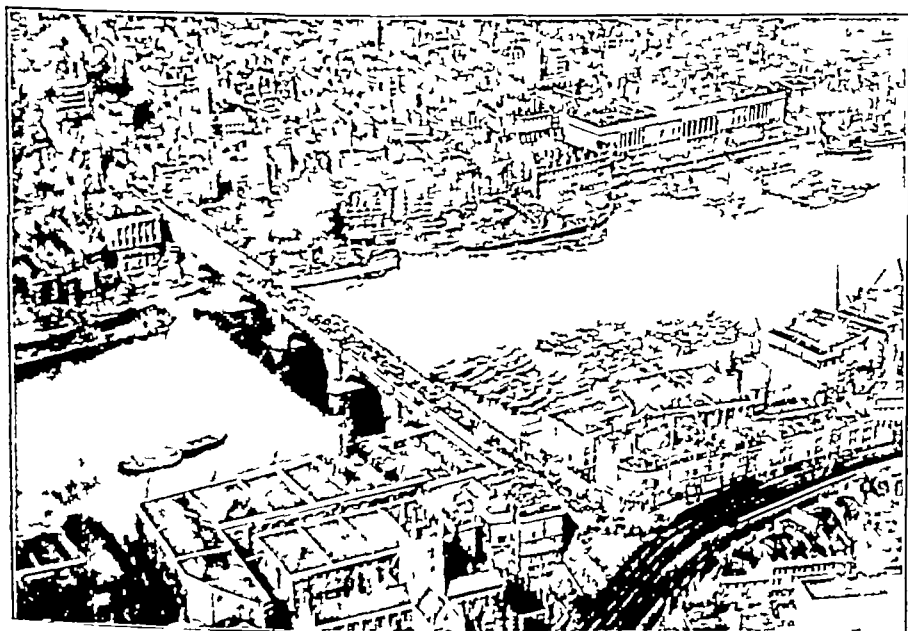
ment it also provides great assistance in defence in a way which you can readily think out for yourselves. History is full of examples of people who have "held out among the hills," or who have been driven into the mountains as their last refuge. A wide tract of desert would, if possible, be avoided by an advancing army on account of lack of water and provisions, as well as of cover and shade, while a swamp, or fen, or marsh, or flooded area is one of the most severe checks, and one of the most powerful means of defence.

Remembering these leading principles, let us examine our own country in a general way from the point of view of the strategist, whose business might conceivably be the defence of these islands when the command of the sea had been temporarily lost. It is generally considered that the portions of England most in danger of invasion are those along the east and south-east coasts, though smaller raids on the other coasts are regarded as quite possible and highly probable. So we have geographical situation and neighbourhood entering into the matter at once. On or near the shores most open to attack lie the chief naval stations of Chatham, Sheerness, Portsmouth, Devonport, and Rosyth, facing the mouths of the Rhine, as well as the French naval ports of Cherbourg and Brest, while damaged ships would find refuge at Portland, Dover, Harwich, or the mouth of the Tyne. The naval supplies would come from Woolwich near London. Beyond



TOWER BRIDGE LONDON

*Central Aerialphoto Co*



LONDON BRIDGE AND CUSTOM HOUSE

*Central Aerialphoto Co*



these shores the two chief naval dockyards are those of Pembroke in Wales and Queenstown in the south of Ireland, while we must note that the geographical position of Ireland allows for a second route from the Atlantic to the great ports of Glasgow and Liverpool if the way by St George's Channel should, for any reason, be untenable.

The preparations of the army for home defence are chiefly, but not by any means wholly, concerned with the protection of London. The capital is not only the "heart" but the "brain" of the Empire, and an effective blow delivered at this vital centre would have consequences of vast importance—to put the matter mildly. To the south the two chief military centres are on Bagshot Heath and Salisbury Plain, not huge fortresses but military encampments of a movable army, each on the flank of an enemy's advance upon London from the south coast, and ready to fall upon a force which was marching from Devonshire, having effected a landing either on the Bristol Channel or in some quiet spot on the south-western coast. On the east the army is concentrated at Colchester for the defence of the metropolis, and there are also large military depots at Winchester and Canterbury, with others at Windsor and Hounslow, while St Albans and Bedford are valuable strategic points to the north of the capital. Apart from the capital and its surroundings, the chief military centres are at York and Edinburgh.

It is felt that these military preparations would be

sufficient to enable the home army to deal with a raid upon our coasts in the temporary absence of the fleet elsewhere. This does not mean that a landing could not be effected or even that it would be opposed at the point of debarkation of the enemy troops. Once landed, the raiders would be subjected to continuous annoyance until they met with a force presumably strong enough to overmaster them completely. But to quote the words of the Committee of Imperial Defence <sup>1</sup> "If we permanently lose command of the sea, whatever may be the strength of our Home Army, the subjection of the country is inevitable." The army for home defence, according to the conclusions of the same body, "ought to be sufficient in numbers and organisation, not only to repel raids, but to compel an enemy who contemplates invasion to come with so substantial a force as will make it impossible for him to evade our fleets."

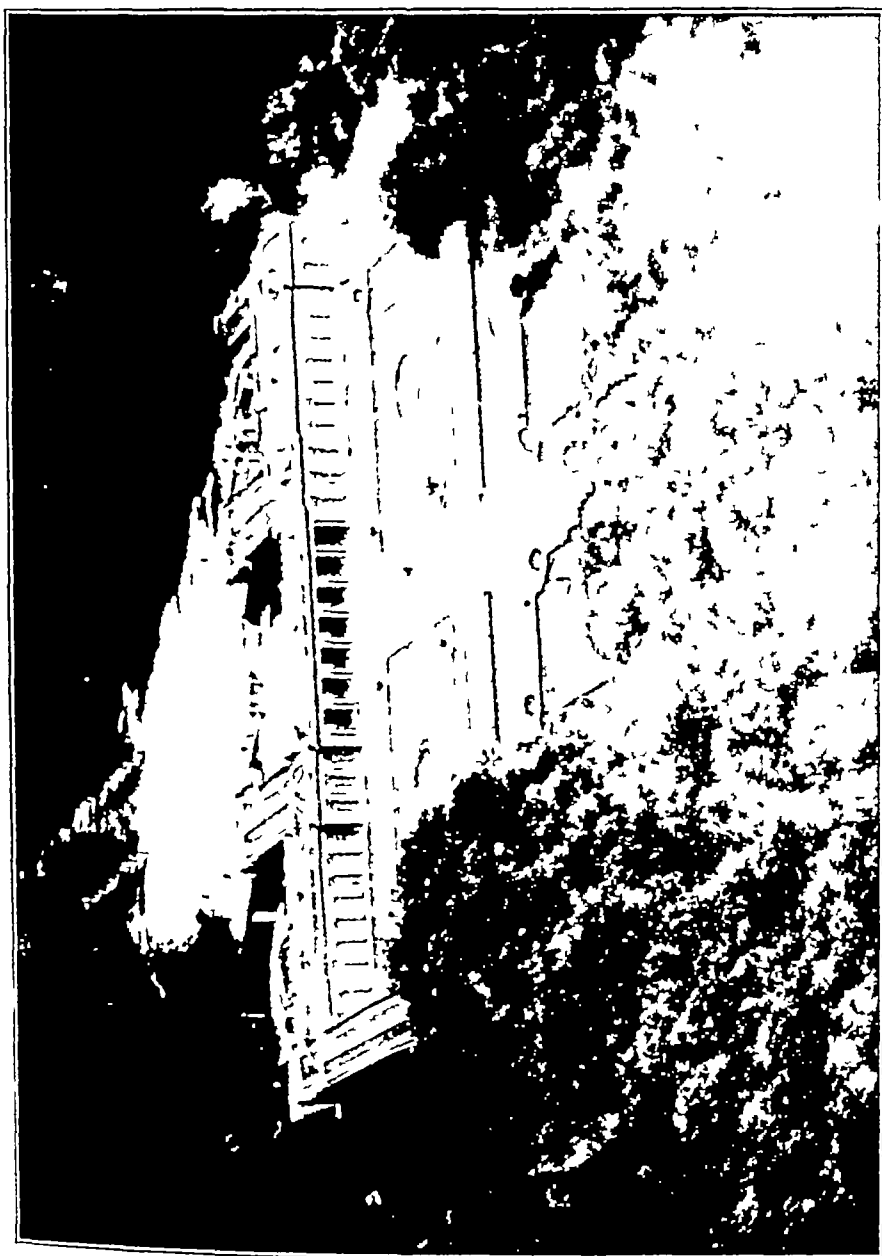
Now the conditions of home defence are continually changing owing to new methods of warfare, and the aeroplane and submarine promise to introduce fresh developments which no man can foresee.

One of the most remarkable features of the Great War was the advance in aviation. Flying machines of various kinds were used not only for making raids upon enemy towns but also for taking part in the fighting on the various fronts, while the sea-plane played an important part in naval operations. When the war was over it was said that the

<sup>1</sup> Report published in 1908

next conflict would probably be a war in the air, and each of the leading nations added an Air Force to their defence services. Chemists produced poison gases of the most horrible character with which aerial bombs could be charged, and lurid imaginative pictures were drawn of the next attacks upon enemy towns and especially upon capital cities. The only alleviation of the dreadful prospect was the assurance by those who spoke as experts that a war of this kind would be brief.

But when all had been said the fact remained that even the most wonderful machines and the most skilled aviators were subject to atmosphere and weather conditions, that is to say, were conditioned by geography. Haze, fog, winds, air-currents, temperature, created difficulties which promised to be as hard to negotiate as the physical obstacles of land and sea which were the special business of the army and navy. Because we cannot *see* the obstacles of the air as we can see the raging water in a storm at sea or the lofty mountain range which may delay an army, we forget that they exist. But the airman knows only too well the difficulties which lie in his path, and knows that a possible enemy would have to face them too. It is said that there are aerial trade winds of great velocity blowing at such immense altitudes as 50,000 feet or ten miles above the surface of the earth, but this is a matter which concerns the peaceful trader rather than the fighting man of the air.



*U.S. Army, 1918. Versailles, France.*

# AERIAL VIEW OF VERSAILLES—TIL IRIANON

Where the Peace which concluded the Great War was signed

## KING COAL OF BRITAIN

WE have seen how dependent we are upon other parts of the world for adequate food supplies, but this dependence, absolute as it is, does not complete the story. If we examine the list printed on page 312 and showing the chief articles imported and retained for home consumption from the principal foreign countries and British possessions, we shall find that it contains some of the most useful and necessary commodities in civilised life *with the exception of coal*, and when we compare it with the list on page 313 we shall see how coal seems almost to be the "money" or, at least, the chief purchasing agent of Britain. It is by means of the coal and the things made by its agency that we pay for the food which we cannot supply for ourselves and every hewer of coal in Britain is a world worker with interests of the widest character.

We can see from our second table how British coal is taken to all parts of the world, and it forms the most frequently used ballast for a ship which is going to come home laden with other merchandise. You will not find the "coal" entry in the latter part of this second list, for British Empire-builders seem to have so designed that our dominions overseas shall include lands already provided with this indispensable fuel, and this is, of course, another tribute to the power and majesty of King Coal.

Needless to say, we raise an enormous amount of this mineral from our pits in Central Scotland, Northern England, the English Midlands, and South Wales. The rocks in which the coal occurs are known as coal measures, and usually include sandstone and a slaty stone known as shale, as well as beds of clay, which are very useful for the manufacture of drain pipes and the rougher articles of pottery. The coal is found in seams or beds of various thicknesses, but unless the seam is more than a foot in depth,<sup>1</sup> it does not pay to work it, especially if it is a long way below the surface of the earth. The greater the depth at which the coal occurs the more expensive it is to work and the higher its price, so that if a country has a great deal of coal in very thin seams or at a great depth it may still be reduced to importing this useful mineral for its own purposes. The coal of Belgium is a good example of mineral wealth buried, for the most part, at a very great depth.

The figures in connection with our coal industry are so large that it is not easy for me to convey to you any clear idea of the extent of the work done in our pits. They show us, however, in the first place, that the amount of coal raised from our mines is about five tons per head of the whole population, and the question naturally arises—Is the supply inexhaustible? It cannot, of course, be absolutely inexhaustible because it is not renewed, even as a supply of timber can be renewed, and the question

<sup>1</sup> A certain seam in Upper Silesia has a depth of 17 yards

becomes one which may be of very close concern to future generations. I cannot find any very definite opinion on this matter, but there is a general feeling among most mining experts that our coal supplies will last for many centuries, and that we have resources in Kent and elsewhere which have not yet been drawn upon or indeed surveyed. Perhaps before our coal supply is exhausted inventors will have found out how to do without it in some wonderful way, the nature of which we cannot forecast.

Consider now that five tons of coal per head of the population, man, woman, and child. Try to think of every one you meet having five tons of coal to dispose of every year. This quantity would make a fairly large heap for your school alone. Roughly speaking, about one ton of every person's allowance is used for buying things from abroad, or in other words is exported to foreign lands, some of it, however, in the form of coke having parted with its coal-gas before being sent out. The value of the coal and coke sent out in ordinary times is about twenty-five shillings per head of the population. A little reflection on these simple figures will help you to realise the importance of our coal industry better than a study of tables of figures in millions.

Yorkshire leads the way in coal raising, and is very closely followed by Durham and Glamorgan, but if we group all the Scottish coalfields together, we find that their output is equal to that of Yorkshire. Lancashire and Derbyshire come next in

order It must be remembered that the coal raised from these mines is not all of the same kind, nor is it employed for the same purposes Three varieties are usually distinguished (1) soft coal, used mainly for household purposes, as well as for making gas and coke, (2) steam coal, which contains more carbon and is used in factories and on the railway, as well as in warships, (3) anthracite, which has the highest proportion of carbon of all the varieties, burns with an intense red glow and very little flame, but is difficult to light and will only burn in special stoves, though if it were more generally used there would be much less smoke, dust, and yellow fog in our large towns Brown coal, peat, and wood may be regarded as the lower grades of the coal family, in order of their proportion of carbon

It is interesting to note which countries take most of the coal sent out from British ports France stands at the head of the list, followed closely by Italy, while Denmark, Holland, Sweden, Spain, and Egypt come next in order For the rest, as we have seen, the precious mineral is sent to almost every civilised country on the face of the globe in quantities varying with the climate and the degree of civilisation to which the country has attained, for, as a rule, the more "advanced" a country is, the more coal it requires Cardiff and the Tyne ports send out by far the greatest quantity

Now I have given you a wrong impression if you carry away the idea that the United Kingdom is

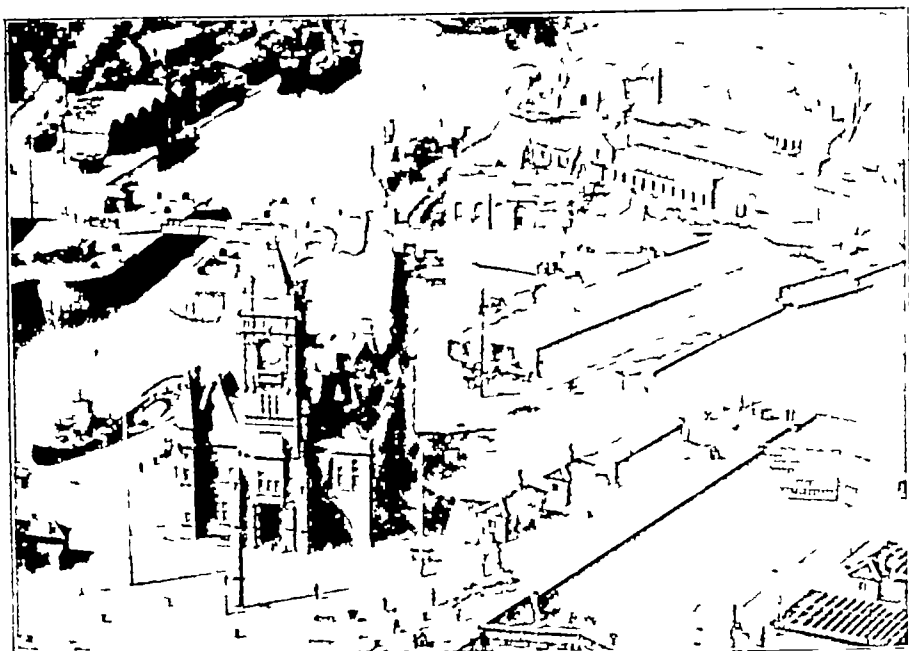


## 66 THE PROGRESS TO GEOGRAPHY VI

the leading coal-producing country of the world for the United States is far ahead of it in this respect, raising nearly twice as much in ordinary times. Britain's exports of coal, however, are usually about five times as large as those of the States, so that our country is still the leading *coal trader*, and will probably keep the first place as she has essential food-stuffs to pay for, which the United States cannot provide for herself.

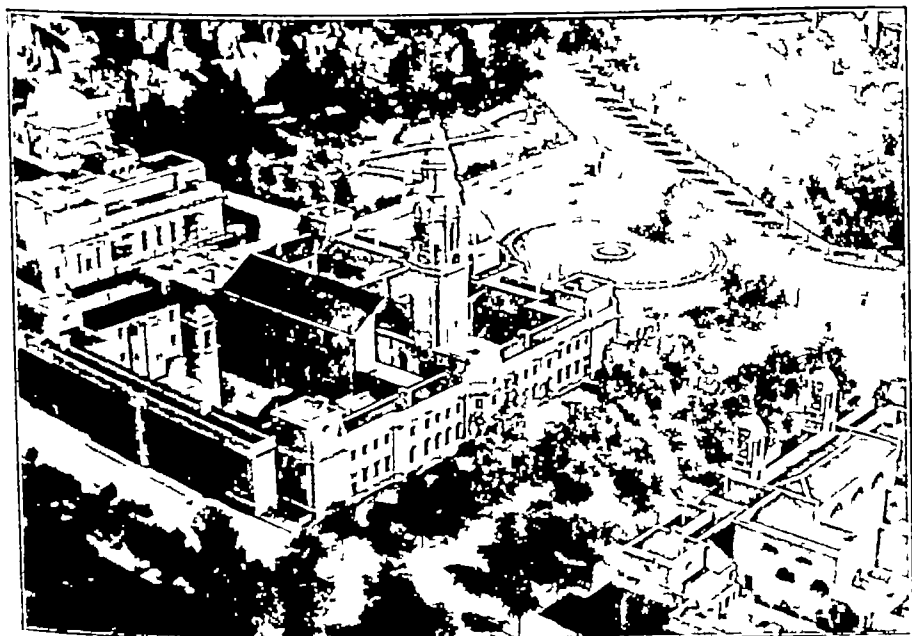
Britain not only uses coal to pay for food, but also to pay for raw materials for the factories in which she uses coal to make things that are to be exported to pay for more food. You will see by reference to the list on page 313 that one of our chief exports is "cotton and cotton piece-goods," which occurs in this table as often as coal itself. Now the raw cotton required for making these things is got from the United States, India, and Egypt, and the coal of Britain is used in its manufacture both directly in supplying power to drive the machinery of the mills, and indirectly in the manufacture of the machinery itself. It is the coal which starts and carries on all this manufacturing and commercial activity.

The coal also helps to pay for the huge quantities of wool which we get from Australia, New Zealand, and South Africa, for you will see by a reference to page 313 that we send out to various parts of the British Empire a great deal of iron and steel, hardware and machinery, which the British states



CARDIFF DOCK OFFICE

[Central Aerial Photo Co.]



CARDIFF TOWN HALL AND ART GALLERY

[Central Aerial Photo Co.]

## 68 THE PROGRESS TO GEOGRAPHY VI

beyond the seas cannot yet produce for themselves. These goods would not be there but for the coal from the mines of Britain. If you follow out these ideas in connection with a comparative study of the two lists to which I have already referred, you will learn a great deal of world geography. There are several indications in these lists as to the climate and life of the people of certain lands, if you know how to make deductions rather in the style of Sherlock Holmes. For example, the relative positions of woollen and cotton piece-goods in the exports from Britain to Canada (see page 313) contain an unmistakable hint as to climate.

We raise, as I have said, about five tons per head of the population, and export only one ton. If we keep our place in the forefront of the coal trade by sending out only this small proportion we must use an enormous amount of coal in our various industries, for household and railway requirements are not very great, comparatively speaking. Think, however, of the great activity in ordinary times of our shipbuilding yards alone, in which coal is very largely used. Britain may be very truly described as the shipbuilder of the world, for in this respect only Germany could be seriously considered as a rival, and her output before the war was only one-third of that of Britain. When the peace was concluded she undertook to build ships for the Allies as part of her reparation for the destruction of peaceful shipping by submarines during the war.

But perhaps I have written enough to prove the contention with which I began—that every hewer of coal in Britain is a world-worker with interests of the widest character. The war and the peace made considerable differences in the statistics of coal production, but these temporary changes did not affect the basic importance of coal in the life of Britain and her commercial intercourse with other lands.

## THE WORLD'S GREATEST TRADER

USING her coal and the things made with the help of it, Britain buys most of her food and the raw material for her industries. It would not be difficult to show how far-reaching is British commerce and how it touches every land, both civilised and uncivilised, on the face of the globe. I suggest that you spend a few days in making inquiries as to the place of origin of the food-stuffs, wearing apparel, and common objects which come into your own daily life, noting carefully the name of each commodity and the country whence it is brought.

You will be obliged to ask a great many questions of various people in making up your list, but if you go about the work in a proper manner you will know more at the end of a week about the far-reaching character of British commerce than if you had spent the time in assiduous reading of text-books.

Of course it is impossible to trace everything exactly, and your list when completed will contain a great deal which is mere guesswork, but if the making of it has brought you into touch with a large number of countries whose ports are visited by our merchant vessels, then the immediate object in setting you this task will have been attained

Let me give you, by way of example, an extract from a list of my own

*Bread* —Wheat-meal from America (the bread was home baked), possibly adulterated with chemicals from Germany, yeast, originally from a brewery near London

*Bacon* —From Denmark, or perhaps America (it *was* rather poor this morning)

*Eggs* —From Brittany, in North-Western France

*Tea* —From Ceylon

*Porridge* —Made of rolled oats from the United States, and eaten with milk of home production, though it *may* have been adulterated with chemicals from Germany

*Marmalade* —Home-made from oranges of Seville in Spain and beet-sugar from France or Holland

*Apples* —From Ontario in Canada

*Bananas* —From the West Indies, possibly Jamaica

*Beef* —Alleged by the butcher to be Scotch, "home-grown and home-killed," but possibly of Argentine nationality, landed alive at Deptford near London and slaughtered in that neighbourhood

*Cabbage* —Grown in my own garden after application of a great deal of chemical fertiliser, which may have been of German or South American origin

*Pudding* —Made of flour from the United States, suet from home, sultanas from Greece, candied-peel from Italy,

and boiled in a cloth made in Lancashire from American or Egyptian cotton. Eaten with butter from Denmark and sugar from South America (Demerara).

*Morning Newspaper* —Printed on paper made from wood-pulp brought from Newfoundland or Sweden or Canada, by means of a press which was probably built in Germany (before the war), and which used ink made from lamp-black prepared from British coal mixed with paraffin from the United States or South-Eastern Europe and resin from the Russian pine-forests, delivered at my door by a very British boy who was munching a cheap French apple and seemed to be talking in a language which belonged to no country with which I am familiar.

*Fountain Pen* (bought before the war) —Used for writing this chapter and made in Austria of rubber from Brazil mixed with German chemicals, provided with a nickel clip from German mines and a gold nib from metal found in Hungary.

So I might go on, following my daily round and continually in touch with some foreign country, or some far-away part of the British Empire. After a few days of an inquiry of this kind, I expect you will have an increased respect for British ships which make this world-wide intercourse possible, and for the achievements of British shipwrights who are continually at work round our coasts building ships not only for ourselves but for other organised countries all over the world. Before the war with Germany we were building three times as many ships as she was building, and when the war had been going on for a few weeks the greater part of

the world's commerce was being conducted either in British ships or in ships built in Britain for foreign countries. For we must not forget the triple character of British influence upon the world's commerce. There are British ships passing between the home ports and countries outside the United Kingdom, others passing from one foreign port to another and acting as carriers, others again, built in our yards but owned and used by foreigners. This summary neglects the coasting trade of the United Kingdom and of other parts of the British Empire, such as Australia, which is of very considerable volume and value.

Our ships are to be found in every sea and practically in every port under ordinary conditions, but there are certain parts of the world of special interest to us because trade has concentrated in them, and there is a definite descending scale showing our dealings with countries beyond our own borders. We carry on a great trade, of course, with India, Canada, and Australia, and a steadily increasing trade with South Africa and New Zealand. But the trade with these parts of the world is not so great as with the United States and France, and with Germany before the war. These were the three leading foreign countries concerned in our commercial activity.

The great commercial intercourse between Britain and the United States is very largely a matter of cotton, the product of the American plantations being the best in the world. Even if the British



AN AERIAL VIEW OF LIVERPOOL DOCKS

10 / 11 / 50



Empire were to grow a large amount of cotton within a short period, Lancashire mills would still draw very largely upon the raw material of Virginia and other Southern Atlantic states where the climate is especially favourable to the growth of the fine-fibred "sea-island" cotton. The great importance of cotton is well shown in the lists of imports and exports. In the former it takes second place after grain and flour, and has twice the value of the imported wool. In the latter, cotton manufactures stand easily first, having thrice the value of the woollen goods sent out, and more than twice the value of the iron and steel. Add to this the fact already noticed that a large proportion of our bread and meat comes to us from the United States, and we begin to see how highly important are our trade connections with that country.

It was natural that a great trade should grow up between France and Britain as soon as these two countries had decided to live at peace with each other, for your history book will remind you how fiercely they fought against each other for many generations. Before the war with Germany the returns showed that by far the greater part of the trade of France was carried on with the United Kingdom, Belgium and Germany coming next in the list, taking imports and exports together. I cannot fix your attention upon one particular set of commodities dominating this trade as cotton dominates our trade with the United States, but



10 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

AN AERIAL VIEW OF BORDEAUX DOCKS

silk and woollen goods stand first in the list of French exports, being closely followed by wine and the finer kinds of machinery, while coal and the heavier varieties of machinery take first place in the British exports across the English Channel. It is interesting to note that though we send a great quantity of cotton piece-goods to France she sends about half as much again to us, being particularly clever at the manufacture of certain classes of goods which we do not make in our own factories.

With regard to our commercial relations with Germany, we must, of course, take the figures which show the value of imports and exports before the war which began in 1914. They are highly interesting as showing the class of trade which was interrupted by that great upheaval and the profitable character of the intercourse on both sides. The chief article taken from Germany was sugar, made from the sugar-beet, while iron and steel with the goods made from them took second place, though if machinery is grouped with these materials they were of higher value than the beet-sugar. Germany also sent us woollen goods and yarn, as well as an enormous quantity of glass and chemicals. This country took from us cotton and woollen goods, coal and coke, iron and steel goods, machinery and herrings, to name only the most prominent articles in the list. On the whole the trade between these two nations was very largely exchange of different qualities or varieties of the same kind of goods, with

the exception of beet-sugar on the one side and herrings on the other

Nearly two centuries ago the great English writer Joseph Addison drew attention to the far-reaching nature of English commerce in a famous passage of splendid prose. It is worth reading again to-day in connection with the inquiry which I have already suggested you should make

“Our ships are laden with the harvest of every climate, our tables are stored with spices, and oils, and wines, our rooms are filled with pyramids of china and adorned with the workmanship of Japan, our morning's draught comes to us from the remotest corners of the earth, we repair our bodies by the drugs of America, and repose ourselves under Indian canopies. My friend, Sir Andrew, calls the vineyards of France our gardens, the spice-islands our hot-beds, the Persians our silk-weavers, and the Chinese our potters

“Nature indeed furnishes us with the bare necessities of life, but traffic gives us greater variety of what is useful and at the same time supplies us with everything that is convenient and ornamental. Nor is it the least part of this our happiness, that whilst we enjoy the remotest products of the north and south, we are free from those extremities of weather which give them birth, that our eyes are refreshed with the green fields of Britain, at the same time that our palates are feasted with fruits that rise between the tropics

“ Nature seems to have taken a particular care to disseminate her blessings among the different regions of the world, with an eye to this mutual intercourse and traffic among mankind, that the natives of the several parts of the globe might have a kind of dependence upon one another, and be united together by the common interest. Almost every degree produces something peculiar to it. The food often grows in one country and the sauce in another. The fruits of Portugal are corrected by the products of Barbados, the infusion of a China plant sweetened with the pith of an Indian cane. The Philippic Islands give a flavour to our European bowls. The single dress of a woman of quality is often the product of a hundred climates. The muff and the fan come together from the different ends of the earth. The scarf is sent from the torrid zone and the tippet from beneath the Pole. The brocade petticoat rises out of the mines of Peru, and the diamond necklace out of the bowels of Indostan ”

It would be a good exercise to re-write the above passage, using the facts given on pages 312 and 313 of this book

## THE GATEWAYS OF BRITAIN

IN a very real sense every city, town, and village of the United Kingdom has more or less communication with the outside world. But there are certain places

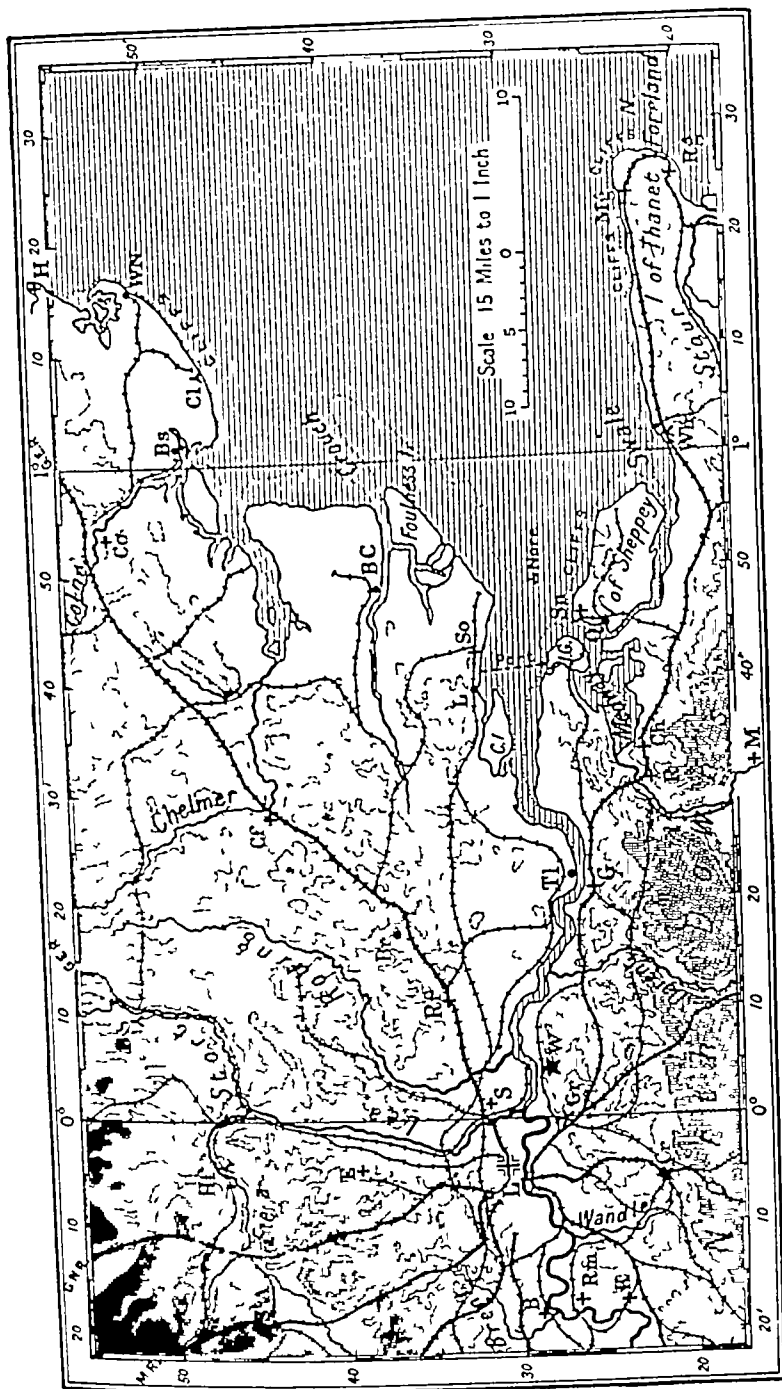
known as ports which we may fitly describe as the gateways of the country, and which may be said to be more intimately concerned with cities and countries beyond our own borders. There are ten of these ports, or groups of ports, round the shores of the British Isles doing an enormous trade with various parts of the world, and their trade is very great when compared with the area of the United Kingdom. A study of the position and activities of these ports, if carried out in close detail, would practically bring into review all the geography of these islands.

Generally speaking, those ports in the south and east of Great Britain have more connection with the Old World of Europe and beyond, and those in the north-west of England and west of Scotland with the New World across the Atlantic. Of the former the oldest and largest is London, which lies on the edge of the English agricultural region within easy reach of the Continent, but yet has a sheltered position far up a tidal estuary. The great port also lay in such a position that it made a natural starting-point for roads to other parts, and the place of these roads has now been taken by the railroads which connect London with every corner of the country where men are congregated. In the old days London Bridge was the great point of convergence for the whole country. In our time the point has broadened into a ring, but the convergence is still the same though the main railways are obliged to stop on the

outer edge of London, which is a serious drawback for collection and distribution, as a little consideration will show

London never had a serious rival in or near the estuary of the Thames, partly because of the low-lying character of the shores, which are marshy and unsecure except near Tilbury and Gravesend, which were fixed upon as suitable points for the defence of the port from the seaward side. Further, the "Downs" off the coast of Kent always formed a place of shelter for shipping in time of storms, so that London became a natural continental centre of exchange. Of course an enormous amount of energy has been expended in deepening, widening, and dredging the river, and in building extensive and deep docks capable of accommodating great fleets of merchant vessels of the largest draught. At one time, too, there were large shipbuilding yards on the Thames, but this industry has practically left the port for other parts of the country, partly because of the absence of coal and iron near the metropolis, partly also because of lack of space for the development of the industry and the trial runs of the completed ships.

The southern outlet of the agricultural region of England is Southampton, once the chief gateway of the country towards France, as London was towards Flanders and the Baltic ports. Southampton is now, however, a world port with a great deal of South African trade, and is also in a sense an



# THE THAMES ESTUARY

The contour lines are drawn at 100, 200, 300, and 400 feet above sea level. The dotted line is the low water mark of spring tides.



auxiliary port to London, for it is easier to land cargoes here and send them by rail to the great exchange and distributing centre than to take them along the Channel, through the crowded Dover Strait, and up the fog-infested Thames estuary, to say nothing of saving time when the cargo is one of fruit or vegetables or meat from North-western France. In the case of a cargo of this description it is literally true that "time is money."

Southampton has a safe and well-protected harbour at the head of Southampton Water, into which flow the Itchen and the Test, one on either side of the town. The harbour is approached by Spithead and the Solent, and owing to the position of the Isle of Wight has two tides, the first through the Solent and the second two hours later by way of Spithead. This double tide has naturally helped



OSTRICH

to increase the usefulness of Southampton as a port, while the Isle of Wight acts as a protection against the south-westerly storms which sweep up the English Channel from the Atlantic Ocean. Ease of railway communication has been chiefly studied in the direction of London, to which travellers from Southampton usually go

if they wish to pass by the quickest route to some other part of the British Isles. Among the leading

imports are wool from Australia and South Africa, as well as ostrich feathers from the latter country, and a great deal of fresh beef from South America. A large share of the exports from Manchester, consisting of cotton piece-goods and yarn, is sent out from this port.

On the north-eastern margin of the English farming country lies the port of Hull, which is joined up by rail, river, and canal to one of the busiest industrial parts of the whole world—the coalfields of North-western England, with their attendant industries, the cotton factories of Lancashire and the woollen mills of Yorkshire. Given a well-protected and convenient harbour—and Hull is now in possession of this—the port was bound to become a great trade centre, especially with the Baltic ports and Norway. It is also convenient for the fishermen who work on the Dogger Bank, though the fish trade has largely gone to Immingham and Grimsby, which are nearer the open sea and better situated for communication by rail with London. The Baltic trade of Hull consists principally in the export of coal and manufactured goods, chiefly hardware, machinery, and textiles, in exchange for food, such as dairy produce, eggs, and beet-sugar, as well as raw materials like timber, wood-pulp, and flax.

Bristol, on the south-western flank of the English farm-lands, naturally looks to Ireland and the New World for its trade, and is nearer to America than either Liverpool or Southampton, besides being only

about two hours by rail from London. The town stands on the Bristol Avon, at the mouth of which there are very large and deep docks for the accommodation of ocean steamers which cannot come up to Bristol itself owing to the narrowness of the Avon and the great rise and fall of the tide in the Severn estuary. The West Indian trade in bananas, pine-apples, and other fruits has been greatly increased during the past twenty years, the nearness to London being a great advantage for the work of distribution. Bristol also takes in a great deal of sugar, cocoa, and tobacco, as well as hides and skins, and has factories for the preparation of these things for daily use. Raw materials, such as rubber, oil, and tropical timbers, also come into this port, as well as a quantity of fresh and cured meat from South America.

To the south-west and north-east of the mineral belt which stretches diagonally across England are the groups of mineral ports which have Cardiff and Newcastle as their respective centres. These two places are the most important coal ports in the world. Cardiff lies at the point of convergence of several narrow river-valleys which are rich in coal, including the hard steam coal so useful for shipping, but destined in time to be replaced by oil for this particular purpose. The coal trade of Cardiff is naturally wider than that of the north-east ports, and the Welsh port owes a great deal of its prosperity to the opening of the Suez Canal. Nearly half of the coal sent out to other parts of the world

goes from this South Wales district. The returning colliers bring back many varieties of goods, but especially wheat, and we find that flour-milling is one of the leading industries of the town of Cardiff.

Newcastle lies at the place where the Great North Road crossed the River Tyne, about ten miles from the mouth of the river, but not beyond the reach of the tide. The river has been widened and deepened up to the great ordnance works at Elswick, where warships of the largest type can be built. The coal is found quite near to the river-bed, and the steam collier of Newcastle is one of the best-known boats in the ports of the world, and especially on the other side of the North Sea. The imports into the Tyne are largely from the Baltic ports, and include dairy produce, bacon, eggs, timber and other forest products, and in exchange for these the Tyne and Wear ports not only send out coal but machinery of all kinds, ships, chemicals, and glass-ware, as well as large numbers of grindstones and millstones.

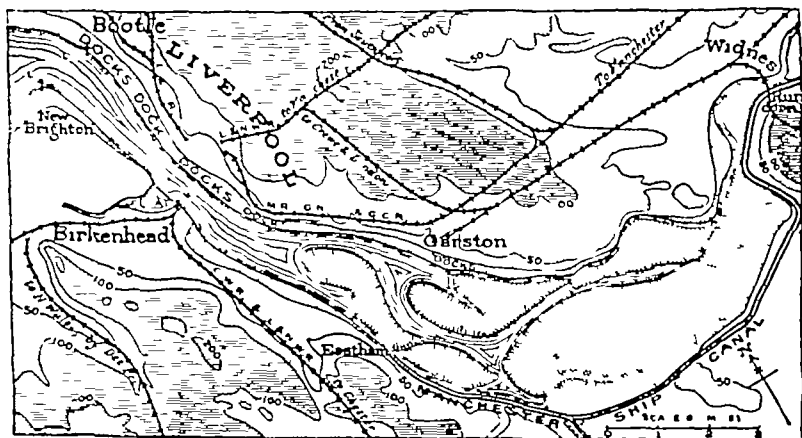
The districts east and west of the Pennine Ridge are the textile centres of England, and their natural outlets are Hull to the east and Manchester and Liverpool to the west. A study of an ordinary map may not show that Manchester has any right to be considered as a "gateway" until we remember the Ship Canal, which has made a seaport of this inland city. This great waterway is 35 miles long and has a minimum depth of 28 feet. It is provided with

two sets of locks suitable for large and small vessels respectively, which avoids the waste of water that would be caused by the too frequent use of the larger locks. The map on page 87 will show the course of the Ship Canal and the manner in which it avoids the marshes of the Mersey. This map also shows the relative position of Liverpool, and the relief which the opening of the Ship Canal must have afforded to the strain upon the railway goods traffic between the two great Lancashire ports. It is easy to see also from this map how Liverpool trade has more of a world-wide character than that of Manchester, which is more or less local.

Liverpool ranks next to London as a port, and is almost equal to it if the trade of Birkenhead is included in the returns of its activity, while it exceeds it in volume of imports. Its chief imports are raw cotton, food-stuffs, rubber, and tobacco, and it sends out cotton, iron and steel goods, as well as large quantities of woollens and chemicals. The great docks of the port extend for a distance of about six miles to Bootle, which, with Birkenhead on the opposite side of the Mersey, may be reckoned as part of Liverpool. The Mersey is the starting-point of many of the great ocean liners bound for American ports, passengers from London having travelled from the Euston terminus of the North-Western Railway.

The great outlet for the Scottish group of coalfields is Glasgow on the River Clyde, famous especially

for its shipbuilding industry The trade of this port is naturally for the most part with the New World, and the nature of the exchange is in some degree similar to that of Liverpool Glasgow is the centre of a great industrial region of manufacturing towns and ports and shipyards, and is not only the largest city in Scotland but the second city in the British Empire It stands at a point where in the olden



THE MERSEY ESTUARY

The dotted areas lie between high and low water level Contour lines at 50, 100, and 200 feet

days the Clyde could be readily crossed, and whence there are easy routes to the Firth of Forth and into the Highlands by way of Loch Lomond The shipbuilding towns of the Clyde extend for a distance of twenty miles along its banks, and not only turn out iron ships, but provide wooden ships, which have been built elsewhere, with engines and other machinery The Clyde shipyards rank first in the British Isles, and therefore in the world On the

other side of the North Channel is the Irish ship-building town and port of Belfast, which draws much of its coal and iron from Ayrshire in South-western Scotland, and is famous all over the world for its linen export

The chief British air-port is London, which is in aerial communication with Paris, Brussels, Amsterdam, Copenhagen, and other Continental cities. The transport of goods by air is at present in its infancy, but will probably be quickly developed, especially in respect of perishable goods

## A NATION OF FREEMEN

You might reasonably urge that the particular method adopted for the government of the British Isles is not a very important matter to the rest of the world. But although Britain has no right to interfere in the national affairs of foreign countries, and very little political power over the other British states which make up the British Empire, her method of governing herself has had more to do with the rest of the world than that of any other country. Here is a world-wide influence of the deepest and most far-reaching character, as I will endeavour to show

In the first place, we might make some inquiry into the British method of government. We shall

then find out what connection it has with geography, and trace its influence on the other races of the world, both British and foreign

We are said to be under a "limited monarchy," that is to say, we have a monarch or king whose power is limited in a certain manner and who reigns but does not rule. The limitation of the monarch's power comes from his ministers, under whose advice he acts and makes those momentous decisions which are the personal concern of every citizen. These ministers or advisers are in their turn responsible to Parliament, of which the more powerful division is that known as the House of Commons, and this House of Commons is made up of members directly chosen by the people. Consequently the answer to the question, "Who governs the British nation?" is, "The nation is supposed to govern itself."

Here you have, in a few simple words, a short description of the British method of government. The British nation is a nation of freemen, each responsible man having a direct share in the government of the country, if he cares to exercise it, not only by the proper use of his vote, but at times of crisis by using his power of persuasion or protest, or even of petition to Parliament or the King. The present method of government has not always been followed in our history, but the power of the people has been slowly won, as our national story shows very clearly, and the plan we follow to-day in ordinary times of peace and quietness is by no means perfect, but we



rarely lose sight of the ideal that for its own happiness and prosperity the British nation must be free to govern itself

The principle is a very old one, and if you read the following extract slowly and thoughtfully you will find it clearly marked in the minds of our ancestors, whose original home was in the continental coastlands bordering on the North and Baltic Seas. This passage is taken from a book written by a historian of the Roman Empire, in which he describes the people of the North, whom he considered uncouth barbarians, but who were never really conquered by the Roman legions or governed by their leaders. These were the Germani or Teutones, among whom were the Angles, Saxons, and Jutes of our early history.

“About minor matters the chiefs deliberate, about the more important the whole tribe. Yet even when the final decision rests with the people, the affair is always thoroughly discussed by the chiefs. They assemble, except in the case of sudden emergency, at certain fixed days, either at new or at full moon, their freedom has this disadvantage, that they do not meet simultaneously or as they are bidden, but two or three days are wasted in the delays of assembling. When the multitude think proper, they sit down armed. Silence is proclaimed by the priests, who have on these occasions the right of keeping order. Then the king or the chief, according to age, birth, distinction in war, or eloquence, is

heard, more because he has influence to persuade, than because he has power to command. If his sentiments displease them, they reject them with murmurs, if they are satisfied, they brandish their spears. The most complimentary form of assent is to express approbation with their spears."

We see here in these people a sense of personal individual freedom and independence, each man being self-reliant and self-respecting, but combined with this personal freedom there is a readiness to place trust in a leader who proves his worthiness and ability to lead for the good of those who are led. We see also the germ of the idea of a Parliament, and this famous paragraph is really a description of a meeting of such an assembly differing only in outward form from our meetings of to-day. There is a Cabinet of chiefs, a Parliament of the tribesmen called together according to custom without undue hurry, a careful and respectful but critical listening to the leader of the day, who must use reason and persuasion if he wishes to follow out what he thinks to be the best plan. And behind it all we have the notion of a nation armed, ready for defence and willing to answer to the call of duty without taking orders even from the foremost leaders.

It is interesting to inquire how far this sense of freedom, which is so evident in those early days, has any connection with geography, that is to say, how far it is based upon the physical character or climate of the country in which these people lived. When

we look into this matter we find that they had made their homes in a land which was on the whole an inhospitable region of fog and marsh, cold wind, snow, and ice, a land which called forth all the qualities of endurance of which the human race is capable if a living was to be won from the marshy or sandy soil and the dark forest, from the river and the cruel grey sea. Such surroundings kill off the delicate and allow only the strongest to survive, but breed in the latter those qualities of sturdy independence and self-reliance which we have seen were shown in the method of government followed by our ancestors nearly two thousand years ago.

It is easy to press this point too far, and we must beware of thinking that the idea of the nation governing the nation came first into the minds of men who lived on the continental shores of the North Sea and round the Baltic, for history shows us the beginning of the idea in Mediterranean lands, where Nature was kinder and the effort to live by no means so difficult. But I think that the sense of personal independence of each unit in the nation is best shown in the long history of what is now known as the British race.

At all events, it is only in the history of Britain that we find this idea of the nation governing itself present in the early times and burning more or less steadily through all the centuries. Other modern nations now have Parliaments of their own, but these assemblies are largely modelled upon ours. For

centuries France was under the rule of a monarch who was more or less a military despot, and it was only about a century ago that she adopted the method under which the nation governs itself. Russia had a Parliament known as the Duma, but it was set up only yesterday, so far as history counts time; and after the Revolution of 1917 it was replaced by an assembly known as the Congress of Soviets, which represented workers, soldiers, and peasants to the exclusion of other classes. Italy has a Parliament, but it only began about half a century ago, and was modelled upon our own by a great Italian statesman named Cavour, who spent many long hours in the Strangers' Gallery of the House of Commons closely studying the methods of what is truly called the "Mother of Parliaments."

The closest parallels to our British Parliament are to be found in those lands which owe their origin to British colonisation—in Canada, Australia, New Zealand, South Africa, and the United States of America. There are many differences, of course, which I need not specify here, but in these lands you will find that the idea of the nation being an assemblage of freemen and governing itself is very clearly and steadfastly upheld, and you will always find in a modern Parliament framed on this idea a Lower House of directly elected members, deputies, or representatives, an Upper House of more or less outstanding leaders of the people, and some person, whether king or president, who occupies the position

of the head of the state And if you do not find the nation to be a warlike nation, living for war and thirsting for conquest, you will find it with the spears handy for defence, *and one in the hand of each man* who will come forward to follow a tried and trusted leader, "because of his distinction in war or eloquence, and more because he has influence to persuade than because he has power to command "

I think you will now agree with me that the British method of government is really a world-wide matter, and that it has had, at least in past ages, some real connection with physical geography

## PART II

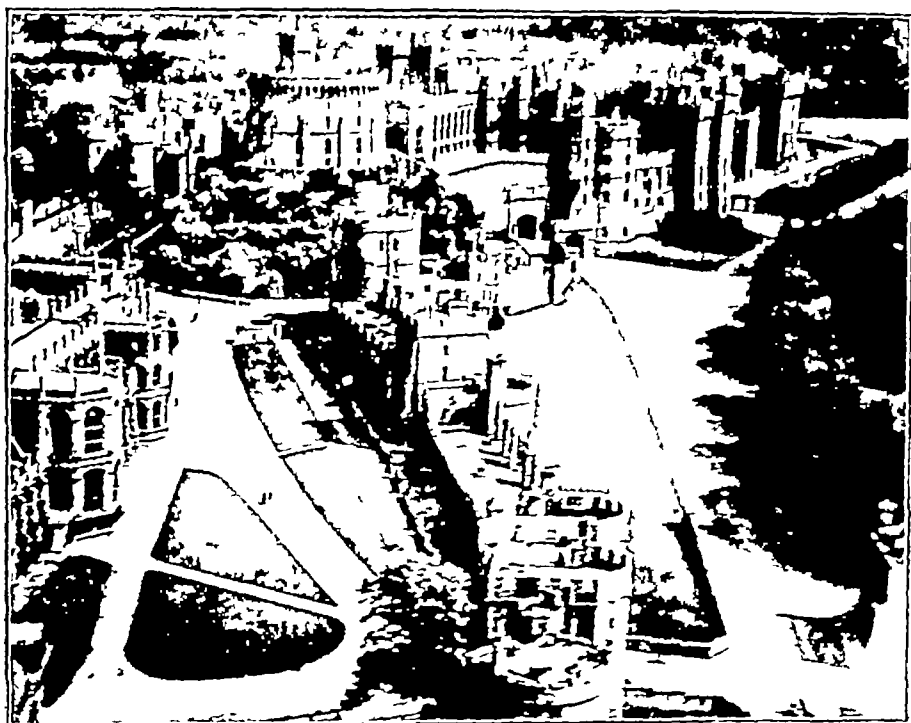
### STUDIES IN BRITISH EMPIRE GEOGRAPHY

#### THE BRITISH WORLD

AN Empire requires an Emperor, and this title suggests power and majesty, as well as awe and obedience, nations "trembling at the nod," and a man raised infinitely high above his fellows, whose power rests upon the sword and the fear of it. In this sense there is no such thing as the British Empire, and the title has been used only because of its convenience and because it seems to be beyond the power of any man to suggest a better.

There was once a great Persian Empire in the East, including not only Persia but wide territories round about that country, at the head of which was an absolute military ruler before whom his people were as slaves whose duty was to work his will. There was a Macedonian Empire built up by Alexander the Great, which included the lands lying between the Ægean Sea and the basin of the Indus, and between the Caspian Sea and the Persian Gulf, and which had the same military and despotic character.

It was Alexander the Great, you will remember, who was said to have wept when he found that there were no more "worlds" to conquer, and if the story is only a legend, it serves at least to remind us how this monarch's Empire was built up and maintained



ROYAL WINDSOR

[Camera Lupa Co.]

for the comparatively short period that it lasted. Then there was a Roman Empire, embracing all the "world" round about the Mediterranean, won and ruled by the sword under a military chief whose Latin title of Imperator has given our English language the term Emperor.

These empires, I repeat, were built up by military conquest. The conquered tribes or nations were kept in subjection, "led captive away" in some cases, and forced to do their master's will on pain of death or torture. The conquering power was exercised over many various nations and tribes, and the unifying or combining agent was fear, though the Romans tried after conquest to arouse in all the conquered nations pride in the fact that all but slaves could become Romans in name, and could earn the right to repeat the proud formula *Civis Romanus sum*—I am a Roman citizen. This was no mere empty boast, but carried with it privileges of real worth as well as duties to the soldier-leaders who held the Empire together by the sword. Each of these old-world Empires was more or less compact from a geographical point of view, with a political centre or capital conveniently placed for government, which included quick suppression of revolt in any of the outlying parts, and was, therefore, connected with those parts by good military roads.

There are points of likeness between the British Empire and these empires of the Old World, and it is well that we should note them before we consider the points of difference. The British Empire has been built up by a strong and energetic race which found its original home too confined for its vigour, and to some extent it was built up in the first period of its history by the power of the sword. Then

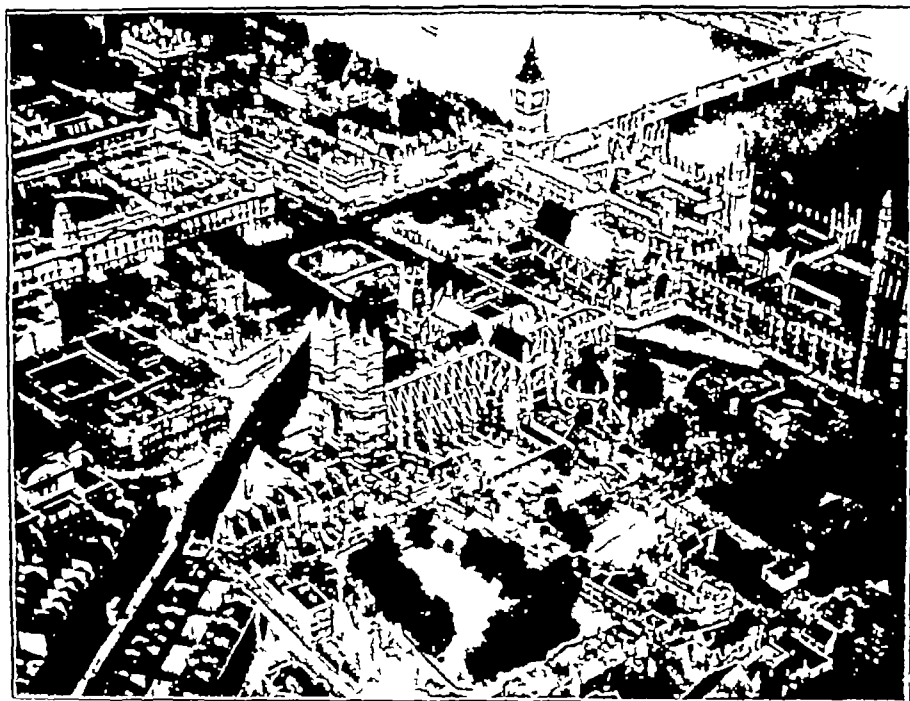


again, British rulers have always maintained that the British point of view and method of rule was the best, and have taught respect for and pride in British citizenship. And the British sword or naval gun is ready at any time for the defence of any part of the British Empire. But here the likeness ends and the points of difference are more striking and more interesting.

One of the chief differences is the scattered character of the British Empire, and upon this fact rests a great deal of its special and peculiar character. British lands are to be found in every continent, British stations, commercial and military, in every sea, while there are no British territories in the immediate neighbourhood of the Mother Country, as a glance at an Empire map will show you. It is very interesting to compare the British Empire in this respect with the defunct Russian Empire or the German Empire or the Austrian Empire, each of which formed a solid mass of territory situated in one particular quarter of the globe, and each of which was governed in a very real sense from a capital city.

Now the scattered character of the British Empire has prevented this organisation of government in a single city, making it a physical impossibility for officials in London to conduct the detailed work of government in lands which are spread all over the world. If all the British states wished to depend upon London for guidance, as a spoilt child is

“ tied to its mother’s apron-strings,” distance alone would prevent them from doing so. As a consequence, when Britons have built up a new country overseas they have been forced to govern it themselves, and they have done so in Canada, Australia,



[Central letter photo Co]

WESTMINSTER ABBEY AND HOUSES OF PARLIAMENT

New Zealand, and South Africa without losing connection with the Mother Country. If a great British state had grown up on the other side of the English Channel, things would doubtless have been different. You see, then, how the special character of the British Empire depends upon distance, that

is, upon geography, for this great modern Empire differs from the older Empires which I have mentioned, in consisting for the most part of a group of free communities united by blood and interest, by the possession of a common flag and loyalty to a single monarch

I am not forgetting the races which look to the British as their rulers, and might be said by our critics or our enemies to live in subjection to them. The word subjection is, however, too harsh a term for the real facts. India does not govern herself, but the country is consistently administered in the first place for the good of its own people, and the best answer to those who ask why we continue to "hold" India, is in the form of a question "What would happen to India if the British rulers left it entirely?" There are other wide territories in Africa which are peopled by millions of natives and ruled by British officials, but the consistent aim of the rulers is to govern these people for their own good, and to teach them that respect for British law means happiness and prosperity for themselves. There is nothing harsh in a "subjection" of this kind. To quote the words of a Prime Minister of the Mother Country, "What we have won by the sword we retain by the more splendid title of just and disinterested rule, by the authority, not of a despot, but of a trustee."

The British have, in spite of many mistakes, proved themselves highly capable of successful

colonisation in other parts of the world, and of ruling subject-races with as little resort to fear as a wise father uses in the government of his own children. It is interesting to inquire into the national qualities required for success in these two directions and find out whether they have any connection with geography.

In the first place, a successful colonising nation must be physically strong, and this is largely a matter of climate, which depends upon latitude, position with regard to the sea, and physical configuration of the country in which the colonising race has its home. In other words, it is largely a matter of geography. Further, a colonising race will be all the better fitted for its work in far-away regions of the globe, if it has been accustomed to some degree of variety in the physical character of the home country, for this change of scenery develops intellectual activity, intelligence, and initiative. The British race is physically strong and hardy because it has had to "stand up to" a more or less rigorous climate, and it is intelligent largely because the Motherland of the race presents great variety in its physical features, though these are necessarily on a rather small scale.

Bodily strength and that activity of mind which usually goes with it, produce the adventurous spirit which longs to "see something" and to share in new and exciting experiences. They also rouse the combative or fighting spirit which takes delight

in seeking out and conquering a difficulty This fighting spirit is not necessarily a quarrelsome spirit, and may be exercised in "clearing the road and bridging the ford" rather than in the use of high explosives and other murderous devices There is a great deal more physical heroism in the conversion of a tangled forest into a smiling cornfield than in shooting at one's fellow-men from a well-built and well-protected trench, and the British scientist who fights malaria is as brave a leader as many a general of great renown, while the colonial pioneer who cheerfully faces awful solitude is no less heroic than the men who advance upon the guns in close formation

Combined with this adventurous spirit there must be a capacity for settlement, for home-making, and for adaptation to new conditions of life The Briton is by nature a rover, but when the roving spirit has been satisfied he is before all else a home maker and a home lover Given a climate somewhat like that of the Mother Country, he will elect to stay where he has struck, to build up a village, a town, a city, a country, a government, an army, a fleet, on the models of those of the land from which his fathers came He may wish to go "home," but it is for a holiday, and the new country of his adoption seems all the more desirable during his absence from it Of course the British official in India or the East or West Indies sends his boys and girls "home" to be educated, and looks forward to living at

Cheltenham or Bath or Brighton before the best part of his life is over, but this is quite another matter in which climate is the chief ruling factor

## EMPIRE PRODUCTS

THE war with Germany which broke out in 1914, as I have said, interested people more keenly in geography than they had ever been before. They learnt the physical features of Europe in a way which burnt the map into their memories, and they soon saw that war, with all its horror and its heroism, was partly a matter of what might be called housekeeping on a large scale. For just as the parents of a household are concerned every day and all day with supplying its members with food, clothing, and shelter, so the leaders of the nation, both civil and military, were anxiously concerned in feeding and equipping the army which was fighting for them, and in ensuring a continual supply of food and raw material for the non-combatants who were working at their ordinary occupations and carrying on the life of the country.

These matters of supply are of course all-important even in times of peace, but the war brought them home to the people of Britain in a very striking manner. For example, the submarine menace made people wonder what might happen to grain ships, and set them also wondering where those grain ships came from, and whether the route was safe,

and it was recognised that one of the reasons for the undertaking of the tremendously difficult task of forcing the Dardanelles was to set free the Russian wheat ships from Odessa, and so keep down the price of the loaf at home. So the brave Australians and New Zealanders who fought in that part of the world were the very close friends and helpers of the somewhat anxious British housewife with a family to feed.

The war also had the effect of drawing a sharp dividing line between the necessities and the extras of life, and showed the importance to which certain things had attained in our modern way of living—such things as rubber, petrol, copper, aniline dyes, and certain chemicals, of which potash was perhaps the chief. The places where these things were produced became doubly interesting, as well as the means and route for conveying them to the places where they were to be used. And of course the most deeply interesting aspect of the whole subject to British people was the power of the various lands within their own Empire to meet the demand for the necessities of life. How far could the Empire supply wheat, meat, horses, and hay, oats, rubber, petrol, iron, coal, copper, chemicals, tea, sugar, leather, cotton, wool, linen, and other outstanding commodities? Tables of statistics became full of life and human meaning. It will be interesting for us to look into this matter from the point of view of the Imperial housekeeper.

In our modern days bread, whether white or brown, means wheat at least to British people. Now the great Dominions of the Empire are situated in what might be called the wheat regions of the earth, and India too is capable of producing this all-important grain in great abundance. Wheat grows best in a temperate and somewhat dry climate, and is one of the characteristic products of the Temperate Zones. If you examine a map of the world showing the British Empire, you will see how far the Empire-builders of past generations have taken steps to ensure the wheat-supply of the British race. At present, as we have seen, we draw a great deal of wheat and flour from the United States and the Argentine, but the British lands are quite capable of making the Empire self-supporting in this respect.

India comes first in the list showing the quantity of wheat raised, but this country needs such a great deal for its own enormous population that it is not the leading exporter and, indeed, export is practically forbidden until the home necessity has been satisfied. If we remember in conjunction with this that British India produces rather more than half the wheat raised in the Empire, we shall realise to some extent the enormous population of India. After this country comes Canada, which provides our chief Empire supply of wheat, the Australian grain being only exported at present in a good year, that is a year following sufficient rains in the wheat districts. Moreover, the single Canadian province of Saskat-



chewan produces more of this grain than the whole of the Commonwealth of Australia. The yield in New Zealand is about sufficient for the needs of that country and there is no regular export. Unless there is a rise in price consequent on a general world shortage, it is found more profitable in New Zealand to consume any surplus grain and export other products.

New Zealand, however, exports a large quantity of oats, chiefly to Australia and Ceylon. But in the growth of this cereal Canada takes first place, Saskatchewan, Ontario, and Manitoba easily leading the way. The Mother Country is, however, not so far behind in this class of farming nor yet in the growth of barley, raising about half of the crop of the whole Empire. Manitoba is the leading Canadian province for the growth of this cereal, which is also largely grown in the island of Cyprus in the Eastern Mediterranean. In connection with barley it is interesting to note the comparative consumption of beer and spirits per head in certain parts of the Empire. If that of the United Kingdom be represented by 9, Australia, New Zealand, and Canada will stand at 4, 3, and 2 respectively. But Canada leads the way in the consumption of spirits.

The New Zealanders are the greatest tea-drinkers of the Empire. Australia ranks second, followed by the United Kingdom and Canada, while of the tea drunk in British lands nearly sixty per cent is grown in British India, the rest, of course, being

raised in the Chinese plantations. This country also supplies by far the greater part of the Empire's coffee, the rest coming from Brazil in South America, while the Gold Coast in West Africa sends out about half of the required quantity of cocoa, most of the



*[Photo New Zealand Govt Tourists Dept]*

MOUNT TARAWERA AND LAKE ROTOMAHANA NEW ZEALAND

remainder being grown in West Indian plantations. The necessary sugar for these beverages is largely raised within the Empire, but this is cane sugar, and if we depended entirely upon this variety of sweetening, our household bills would be much larger than they are. A great deal of the sugar used in Britain

is produced from the sugar beet and comes to us from the continent of Europe India now leads the way in the growth of the sugar cane, while Australia is steadily gaining upon the West Indies, and there are extensive plantations in the Fiji Islands, British Guiana (the Demerara variety), and South Africa

So much for the bread and beverages Now let us look into the matter of meat and live stock, remembering at the outset, as we have already noted, that sixty per cent of the beef and mutton required in ordinary times for the United Kingdom is home grown The rest comes largely from the Argentine (beef) and Australasia (mutton) Australia leads the way in cattle and sheep, while New Zealand and South Africa are about equal for sheep-rearing Ontario stands at the head of the swine list and Australia comes next Canada and Australia run a dead heat for horses, though New Zealand is not very far behind when we take her area into consideration

I have space to consider only four of the chief commodities which are "not to be taken inwardly," namely cotton, wool, rubber, and petroleum<sup>1</sup> From the point of view of the Empire provider it is satisfactory to find that enormous quantities of cotton are grown in India, but the needs of that country are so great that the rest of the Empire cannot look to it for a constant and increasing supply for the cotton mills of Lancashire Besides, the quality of

<sup>1</sup> A good deal of this is taken as a medicine in the form of emulsion

the Indian cotton is not to be compared with that of the United States, and those who wish to see the Empire "self-contained" must often rail at the stupidity of George III and his advisers who allowed this great country to separate itself from the British Empire. Such people think not only of cotton but also of the meat and wheat which would have been added to the Empire stocks if it had not been for George Grenville, Lord North, and their royal master.

It is more cheering from the Imperial point of view to turn to the sources of our wool-supply, and here we must make a pause to give credit to the Mother Country, which still produces huge stocks of wool of the very finest quality, as much, indeed, as South Africa, which makes a special feature of its wool production. Of course Australia leads the way and grows four times as much wool as New Zealand. It is interesting to note that sheep are not reared in very large numbers in the United States, so that if that country holds most of the cotton it must look to the British Empire for a great deal of its wool, which serves to balance things and create an exchange profitable to both sides.

India is the richest Empire source of petroleum, which also comes in large quantities from Canada, but on the whole the British Empire is somewhat lacking in this very necessary article, and must rely largely upon the United States. Half of the rubber raised in the Empire comes from the Malay States,

the rest from Africa and the northern part of Australia. The two largest markets in the world for selling and warehousing rubber are London and Antwerp, and it is significant of the value of rubber and petrol in war that on the approach of the German forces to Antwerp in October 1914 the rubber stores in that city were all removed to London, while the oil tanks of the Belgian port were set on fire before the retirement.

Let me give you, in conclusion, for your own study and comment, a short list showing what percentage of the whole world's production of certain useful things comes from the lands within the British Empire

	Per cent.		Per cent.
Gold	60	Tea	60
Wheat	19	Coal	30
Cotton	21	Copper	9
Cane sugar	37	Tin	52
Cocoa	34	Iron	9
Coffee	2	Zinc	21

## EMPIRE COMMUNICATIONS

WHEN we consider the scattered character of the various portions of the British Empire, we see how important it is that communication between its various parts should be as safe, easy, and quick as geographical circumstances will permit. Upon this ease of communication depends the very life and

character of the Empire as a whole , and the laying of a new ocean cable, the shortening of a sea route, the increase of speed in ocean liners, the establishment of new wireless stations or aerial routes are all matters of supreme importance to the British Empire

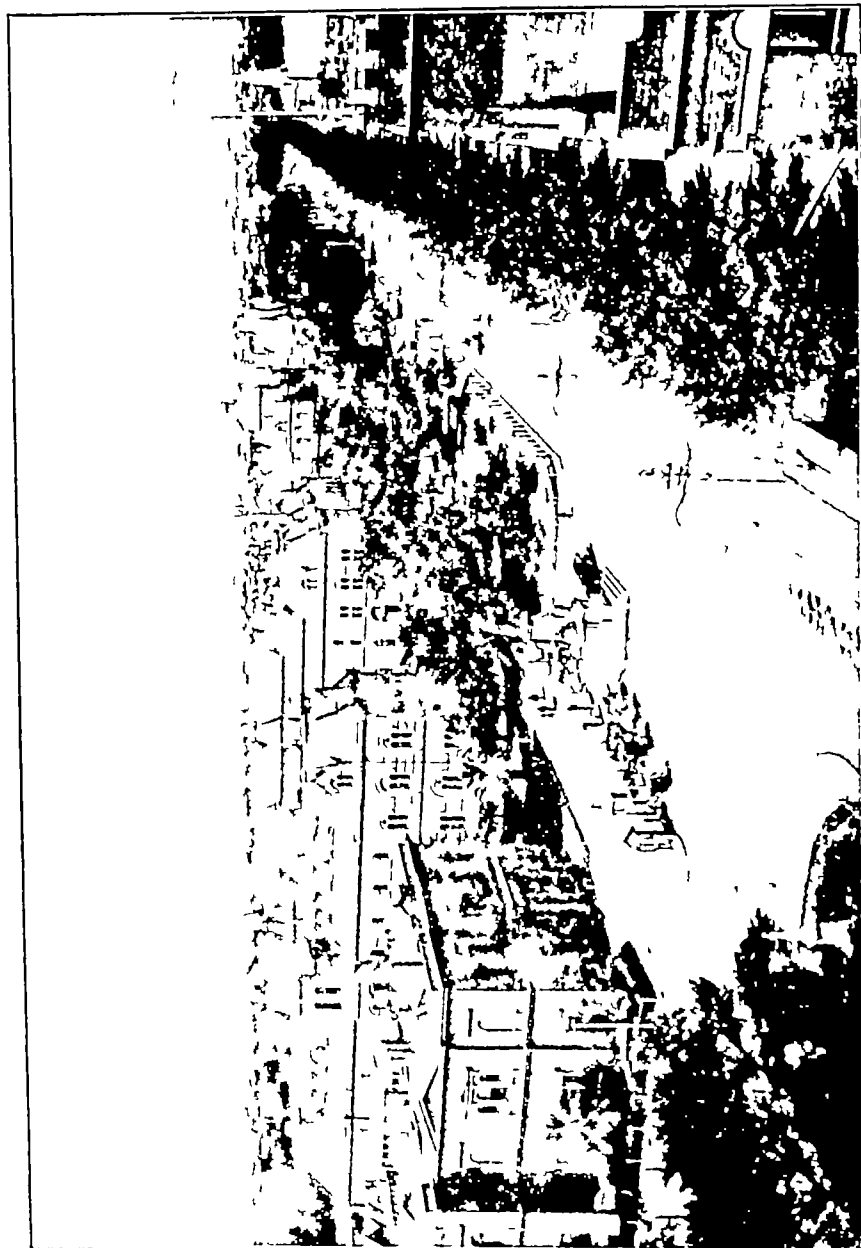
In our admiration of the magnificence of the latest ocean liners we must not, however, forget the greater importance of the cargo vessels which carry on the enormous trade between the various parts of the Empire, as well as between these British lands and foreign countries When the Germans torpedoed the *Lusitania*, that huge floating hotel, it was truly said by one writer that from the point of view of military genius it would have been much wiser on the part of our enemies if they had sunk a number of comparatively small trading vessels carrying wheat, meat, rubber, or copper from America to this country. We must never forget that it is trade which is the first cause of Empire growth, and that it is trade combined with kinship in language and life which holds the Empire together

One of the busiest of the Empire water routes is that between Britain and North America At the British end the chief termini are Glasgow, Liverpool, and Bristol, while on the other side steamers make for Montreal and Quebec in summer, and for St John's or Halifax in winter, while the leading port of the West Indies is Kingston in Jamaica

Linked up with this busy ocean route are the great railways which cross Canada from east to west,

and which at one time carried all the trade from the ports of the Mother Country to those on the Pacific seaboard of the Dominion. But the opening of the Panama Canal, which severs the isthmus between North and South America, will make possible a sea route between Britain and British Columbia which will compete with the land transit across the Continent, though we shall doubtless find that the continental railway companies will adopt every possible means of meeting the competition set up by the cutting of this waterway. And we must remember that the retention of this transit trade in the hands of the Canadian railway companies will be an Empire matter, for the Panama Canal will be an international waterway which will be practically in the hands of the United States, and which could be easily rendered useless to British traders if circumstances should unfortunately make that course necessary.

The three chief sea routes between Britain and Australasian ports are those by the Mediterranean Sea and Suez Canal, by the Cape of Good Hope, and by Cape Horn. The British termini of these routes are Southampton and Plymouth, while Bristol will doubtless become the busy terminus of the route by Jamaica, Panama, and Tahiti. There is also a route from Liverpool across Canada, and then over the Pacific *via* Honolulu and Fiji. The Australasian termini are Adelaide, Melbourne, Sydney, and Hobart in Australia, and Auckland and Wellington in New



*(Photo University of Adelaide)*

NORTH FERRACE, ADI LAIDE

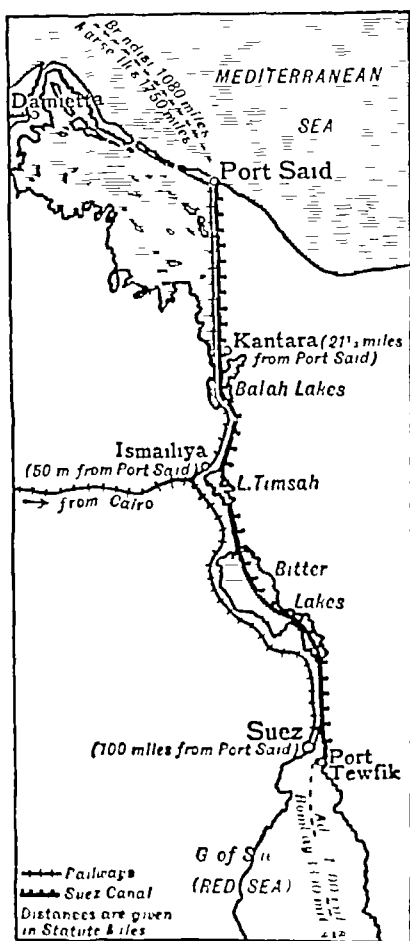


Zealand The Panama route to Sydney is 600 miles longer than that by way of Gibraltar, Suez, and Colombo, about the same as that *via* Teneriffe and Cape Town, or the route from Liverpool already mentioned The route from Southampton to New Zealand by way of the Suez Canal is roughly 13,000 miles in length, and that by way of Cape Town is about the same It is shorter by about 800 miles to go from Liverpool across Canada and then *via* Honolulu and Fiji, while the route from Plymouth *via* Madeira, Rio de Janeiro, and Cape Horn is still shorter by about 200 miles But the route from Bristol *via* Jamaica, Panama, and Tahiti is about 1500 miles shorter than that from Southampton by way of Gibraltar, Suez, and Colombo

The mails for Australia go by the Suez route in ordinary times, and so do most passengers, as they can save a week of sea passage by going overland to Brindisi in the south of Italy But the greatest part of the New Zealand and Australian trade with the Mother Country is carried on by the Cape of Good Hope route, on which there are no canal dues to pay, and no restrictions as to size of vessel as there are in the Suez waterway It is a common practice for traders to go from Britain to New Zealand by way of the Cape of Good Hope, and to return by way of Cape Horn, which is almost entirely a homeward route It is interesting to note that the Suez route takes more Australian trade *homeward*, the expense and other disadvantages of the Canal being counter-

balanced by the advantage of quicker transit for cargoes of meat, butter, fruit, and wool sent from Australian ports to Southampton and London

Communication by sea and land is supplemented by a system of imperial telegraphy more or less complete, but not purely under British control at the time at which I write. Several trans-Atlantic deep-sea cables connect Ireland and Britain with Newfoundland and Canada. The Mother Country is also connected in this way with Cape Town and Australia, as well as with St Vincent in the West Indies, Ascension and St Helena Islands in the South Atlantic, Mauritius in the Indian Ocean, and the Cocos-Keeling Islands in the Pacific. Australia is connected in the same way with New Zealand, and there is a trans-Pacific cable from Australia and New Zealand to Norfolk Island, Fiji, Fanning Island, and Vancouver. Cables also run by Malta, Egypt, and the

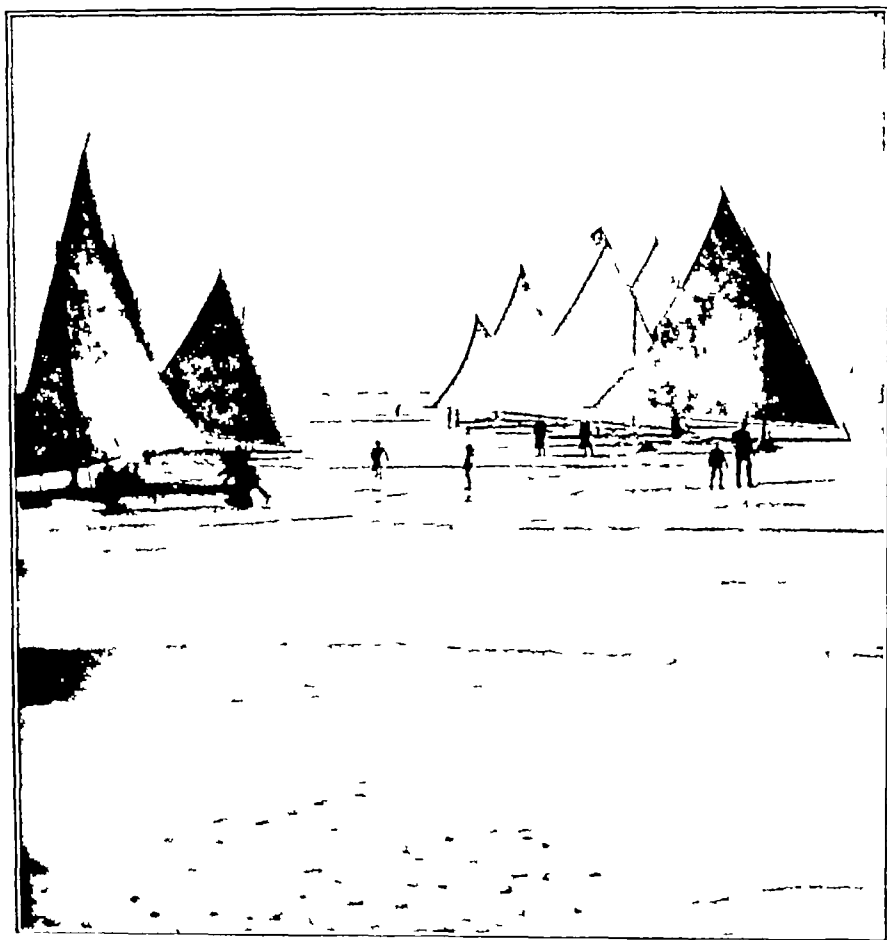


SUEZ CANAL

Red Sea to Aden, and thence along the east coast of Africa to India, Singapore, and Hong-Kong. There is, moreover, an imperial system of wireless telegraphy, the stations being in England (Leafeld and Devizes), Egypt (Cairo and Ismailia), India (Poona near Bombay), East and South Africa, and Singapore, while the Governments of Australia and New Zealand have also undertaken the setting up of wireless systems, and there are now stations all round the coast of the former country. There are a large number of radio-telegraph stations in Canada and long distance stations near Gluce Bay, Cape Breton, and at Newcastle, New Brunswick, each with a range of about 3000 miles.

In studying the commercial communications of the parts of the Empire we must not think solely of the trade between the Mother Country and the oversea dominions. There is a great deal of inter-colonial trade between various parts of the Empire outside of the Mother Country, and this is bound to develop, especially between those portions like Canada and Australia which are on opposite sides of the equator and can therefore supplement each other's needs with seasonal products. Australia also carries on a large trade with India and Ceylon as well as with New Zealand. There is further a great deal of home sea-borne commerce along the coasts of Australia, as well as across the Bay of Bengal between Madras and the ports of Rangoon and Singapore, and across the Indian Ocean between Port Natal

and Bombay The traffic on the Great Lakes of Canada and the canals which have been cut in connection with them is very heavy, and there is a



ICE YACHTING CANADA

*Continued*

great deal of water-borne commerce between Canada and the United States which has nothing to do with the "ocean sea"

Everywhere throughout the Empire there is commercial activity, interchange, and communication helped by rail, steamship, telegraph, motor, coach, and ox-cart, while the imperial centres are now being connected by aeroplane and airship. Yet much remains to be done to improve the means of intercourse and to ensure that they lie entirely within British control. On these matters the future character, indeed the existence of the Empire as an association of free states depends.

It is interesting to consider in this connection the interchange of the people of the various parts of the Empire, and the nationality of the emigrants who go from Europe or elsewhere to find a home in British lands beyond the seas. On the whole there is a more or less steady stream of British people to Canada, Australia, and New Zealand, but in connection with the first-named country the emigration tables show one or two interesting facts, perhaps the most significant being that between 1897 and 1913 nearly as many people went to Canada from the United States as from Great Britain and Ireland. Canada has also taken a large number of people from foreign countries, especially from Italy, France, Germany, Austria, Hungary, and Scandinavia, as well as a considerable number of Jews.

## SOME EMPIRE CITIES

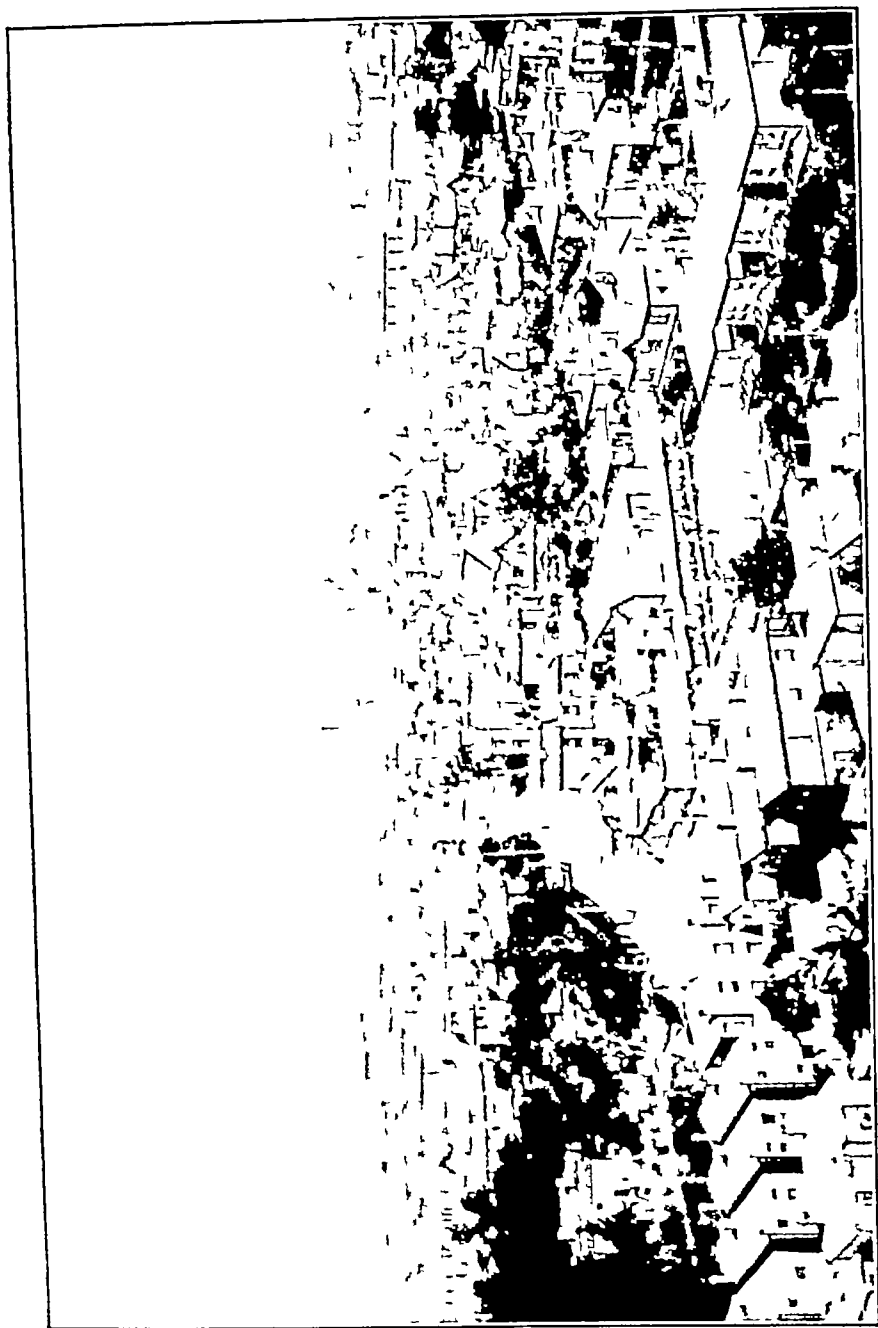
BRITAIN has often been called the "workshop of the world," and most people consequently think of this country of ours as a land of smoky and dirty towns. The great British lands beyond the seas are "rolling prairies," "extensive sheep downs," "the paradise of the farmer," and so on, and many people have formed the opinion that all the men and women in these British states live the country life, each homestead being miles away from anywhere. Books, pictures, and the conversation of travellers all convey these two impressions and emphasise this sharp distinction. But each impression requires modification.

No one can move freely about our own country without noticing that the towns, after all, occupy only a very small portion of it. The traveller by rail is impressed with this fact except upon a short journey by a slow train, say in the Black Country or in some part of Lancashire or of South Scotland or in the Tyneside district. The express train quickly clears the town, and then for miles and miles it runs through open country, often without even a village in sight. One day not long ago I stood upon Hindhead Beacon in Surrey, from whence I had a glorious view of typical English country to north, south, east, and west, and what impressed me most vividly as I gazed outward and around was not so much the beauty of the scenery, great as it was, but

the absence of towns even of a smaller size. There was ample room in this corner of "crowded England" for miles and miles of moorland, woods, and meadows, and this is not the only corner of Britain where the open character of the country is forced upon the mind of the traveller who goes about with his eyes open.

On the other hand, we are very apt to forget the great towns of the new British lands beyond the seas. In spite of the abundance of room in these great countries, and the fact that their prosperity depends mainly upon the soil and the work of the farmer, who must have ample "elbow room," we find the population seeking the towns by a very natural instinct, and it is interesting to note that about three out of every twenty people in Australia live in Sydney and its suburbs, that about the same proportion of the population of New Zealand live in the two leading towns of Auckland and Wellington taken together, and that about three out of twenty-eight Canadians live in Montreal and Toronto taken together. For purposes of comparison it is well to remember that three out of twenty-one British people live in London, using the name in its widest sense. On the whole the townward trend in the new British states is about the same as in the Mother Country.

I say nothing at this point about the rightness or wrongness of this. Let us accept the fact of the importance of the great Empire cities, find out where



A VIEW OF WELLINGTON NEW ZEALAND



they are, how they are distributed, what is the particular work of each, and what is the nature of its influence. We must not, of course, neglect those of the Mother Country, but we shall make an attempt to look upon them not as British but as Imperial centres.

My daily work takes me into many parts of London, and I have noted a great change which has come over the city since about the end of the reign of Queen Victoria. London has become a great Imperial centre, and this is typified to the quiet observer by the stone pillars set about the immediate approach to Buckingham Palace, each of which is inscribed with the name and device of some part of Britain Overseas. Here, at the very heart of the Empire, the world-wide character of the British state is fully recognised. In the West End of London some of the busiest and most attractive offices are those which are concerned with the government of, or emigration to the various parts of Britain Overseas. Visitors from Canada, New Zealand, Australia, and South Africa are constantly met with in the streets, and during the war with Germany colonials in khaki were very evident. The riverside warehouses, wharves, dockyards, and shipping continually remind one of the British states beyond the seas. The Indian turban no longer excites remark or even curiosity, and fitly enough the University of London finds its home in the great building known as the Imperial Institute.

The chief industry of Glasgow, the second city of the Empire, namely shipbuilding, is a direct Empire concern, both mercantile and naval, while the Plantation Quay and the Terminus Quay remind us of West Indian trade and of emigration to the Canadian farms respectively. Here, too, the offices and warehouses are very largely engaged in the American and Canadian trade. This trade is of course, shared with Liverpool, the third of our Empire cities in point of population, but a great deal of Liverpool's trade with the New World is concerned with the import of cotton from the United States, and has consequently nothing to do with other parts of the Empire. The geographical situation of Liverpool and Glasgow has, of course, determined the nature of their trade. I leave you to think out for yourselves the reasons why there are no great Empire ports on the west coast of Ireland, which seems at first sight to provide the best geographical situation for trading with Canada and the United States.

The two leading cities of Canada are Montreal and Toronto, but between them they have a population not a great deal larger than that of Birmingham. Montreal owes its pre-eminence to its situation at the head of the St. Lawrence ocean navigation and the commencement of the inland lake and canal system, which makes this part of North America a busy region of exchange, not only between Europe and America, but also between Canada and the United States. The city is connected by rail with

every place of any importance in North America, and is the headquarters of the Canadian Pacific line which crosses the continent to Vancouver. The harbour of Montreal contains seven miles of deep water. Toronto stands on a beautiful circular bay on the north-west shore of Lake Ontario, and is about 330 miles from Montreal, having a specially favourable situation for distribution of goods in the region of the Great Lakes. It is to be noted that neither of these two busy cities is the political capital of Canada, but Ottawa, which in point of population ranks fifth among Canadian cities, being exceeded by Winnipeg and Vancouver. The latter city in British Columbia is often spoken of as the "Liverpool of Canada," and is developing a great trade which the Panama Canal will doubtless increase very largely.

We have already seen how large a share of the Australian population is found in Sydney, which ranks roughly with Liverpool in the number of its people. The Australian city is, however, a breezy place, where life is lived very largely in the open air, especially on the splendid harbour on the shores of which it stands. Part of the extensive water frontage of the city has been laid out in pleasure promenades and gardens, and, on the whole, there is not a great deal of the "town," as the word is understood in Britain, about the capital of New South Wales. Many of the business people of Sydney live in outlying residential quarters and travel to and

from their offices not in stuffy trains, as in London, but in ferry boats which ply in large numbers on the harbour. The climate is equable and healthy, and among the young men of the place summer camps are greatly favoured for residence, while yachting regattas are frequent on half-holidays. The export trade of Sydney practically sums up the entire work of the temperate portions of the Australian continent, and together with the import trade makes this port the fourth in the Empire.

Melbourne, the second city of Australia, stands on the River Yarra and is a mile square, each street being one mile long and each corner an exact right angle. Round this four-square centre are many pleasant suburbs extending for a considerable distance in all directions and bearing "home" names like Windsor, Sandringham, Brighton, etc. Port Melbourne, to which come the great ocean liners, lies lower down the river. Like the rest of the cities in the British lands across the sea, Melbourne has a very English appearance, while the people and their ways are very suggestive of "home" to the traveller, though the climate of the place is, on the whole, much warmer than in Britain, and white linen suits and pith helmets are commonly worn in the summer.

The picture of Wellington in New Zealand, shown on page 121, is also very suggestive of England, or, say Leith on the Firth of Forth, the port of Edinburgh. You see the same type of house and street,

the small house gardens, the quiet bowling-green, the warehouses, and the wharves, and shipping in the distance. The city stands on Cook Strait, a narrow passage between two high islands, in which the winds concentrate with such power that the port has earned the name of "windy Wellington", and it is said that a Wellington man is known wherever he goes by his habit of clutching his hat whenever he comes to a street corner. Its situation makes it an excellent distributing centre for New Zealand, and in its magnificent harbour the largest vessels can ride in safety. Wellington was one of the first towns to be founded in this country. Auckland, on the Hauraki Gulf, is the commercial capital of New Zealand, and might have been the government capital but for the more central situation of Wellington. This New Zealand city is in easier communication with the United States than with the Mother Country, and this fact is somewhat in evidence for those who care to examine closely the goods displayed for sale in the shops of the city. Auckland is a great timber port among other things, and its export of frozen meat is very large. Naturally enough, a great deal of its trade is carried on with Fiji and the South Sea Islands.

About the time of the founding of Wellington, the Chinese island of Hong-Kong, at the mouth of the Canton River, was ceded to Great Britain, and here was established the port of Victoria, which is a British naval and military station and the chief

centre of commercial communication between Great Britain and China, being the outlet for the tea, silk, drugs, and hemp of the latter country, which are sent out in exchange for the cotton, woollen, and iron goods of the former. There is little to remind the British traveller of "home" in this busy port, which contains people of almost every Eastern race—Chinese, Japanese, Hindus of various tribes, Malays, Turks, and Jews, with a few British officers, soldiers, marines, or sailors. The streets of the city are full of strange and varied life, the harbour alive with shipping of all nations and with the small sampans or houseboats in which a large part of the native population make their homes. Another Empire city of an entirely foreign character is Singapore, also on an island near the extremity of the Malay Peninsula, lying on the ocean highway to the Far East and forming an important coaling-station of great strategic and commercial value. Singapore is one of the most cosmopolitan cities in the world, and only its government is British, the greater number of the people being Chinese, most of whom come here to make money and then go back to their native country to live upon their savings.

The great cities of India are also very foreign in appearance to the British traveller, though Calcutta has a European quarter where the architecture, at least, is in the British style, and the shops rival those of London, Paris and New York. But even in these parts the life of the streets is not British,

and is, therefore, all the more interesting to the visitor who remembers that all these strange people whom he meets upon his way are under the government of a handful of British officials—one of the



A PALANQUIN CALCUTTA

strangest things to the thinking mind in the strange land of India. Calcutta is not now the government capital of India, which has been fixed at Delhi, the old royal city of the Mogul Emperors, to whose power the British succeeded, but it is by far the most populous and the busiest of Indian cities, containing

with its suburbs a population nearly twice that of Liverpool and far exceeding that of any other Indian port in the volume of its trade, except Bombay, which is the great cotton port and manufacturing centre of the East. This city, too, is a blend of British and foreign, and contains a large number of



RICKSHAW ON THE ISLANADI DURBAN (NATAL)

Japanese, Chinese, Arabs, and Persians, while the leading merchants are the Parsis, who can be easily recognised by their peculiar headgear, a tall, pointed linen cap.

A great deal of Bombay trade is carried on with Durban or Port Natal across the Indian Ocean, and many Hindus of various races are to be found in this South African centre, indeed, nearly one-third



of the population of Durban is of Asiatic origin. Durban has a splendid harbour, open to the largest ocean-going vessels, extensive wharves, and roomy warehouses, electric plant for loading coal, and a floating repairing dock to which a floating workshop is attached, so that the chief port of Natal is quite alive to its commercial opportunities, which a study of its position with regard to the rest of the Empire will soon show to be very great indeed.

Cape Town is, of course, the leading Empire city in the Union of South Africa, and the legislative capital, the executive capital being Pretoria. Here we have a city of a unique character, partly British, partly Dutch, and very largely native, the native South African "boy" being very evident in the streets and houses of the city, for he makes, on the whole, a fairly satisfactory servant, messenger, porter, labourer, or cab-driver, and engages in street hawking of various kinds. Some of the pleasantest suburbs are situated on the slopes of Table Mountain, and in house-building Cape Town is developing a style which is described as Afrikander, and is a blend of British, Colonial, and Dutch architecture.

## THE BRITISH TRUSTEE

THOSE British people who have made new homes in lands across the sea have in many ways ordered their

lives on the plan of the people in the Old Country, and they have in time aimed at setting up a new British state which will look after its own internal affairs, that is to say, will govern itself. But these British people form a comparatively small proportion of the population of the British Empire which includes many millions of native races, Indians, Malays, Chinese, Maoris, South Sea Islanders, Kaffirs, Zulus, Basutos and negroes of the Soudan, Central and West Africa. Our attitude towards these native races is best expressed in words which I have already quoted, but which are well worth learning by heart. "In India, whatever we won by the sword we hold and we retain by the more splendid title of just and disinterested rule, by the authority, not of a despot, but of a trustee."

Now a trustee is a person who is appointed to look after the property of some one who has died in the interests of other people who are not able to look after themselves, who are very often children of tender age, and among all right-thinking British people the duties of a trustee of this kind are considered very sacred while the man who neglects or abuses his trust is considered to be a very wicked person indeed, and much worse than a common thief. The British nation's duty towards the native races of the Empire is that of a trustee. On the whole, these races have come to recognise this fact and to look upon the British officials, soldiers and police as their protectors and guides rather than as their

masters and rulers , and the chief things which hold the Empire together are respect for law and equal dealing between man and man

It may be asked why Britain has established herself in those parts of the world where for reasons of climate her own people can never hope to make permanent homes There is a well-known saying that " trade follows the flag," but it is just as true if it is reversed so as to read " the flag follows trade " These great countries peopled by native races and situated in or on the border of the tropical regions produce certain things which are found exceedingly useful and often indispensable in the modern life of more temperate lands, such as tea, coffee, sugar, petrol, rubber, cotton, copra (dried cocoa-nut kernel), and rice, while the dense black or half-black population offer markets for our manufactures, and especially for the cotton piece goods made in Lancashire When the white man has gone to one of these regions to engage in trade, he has usually found that the organising of the production and export has had to be done by himself, and having taken in hand the management of these things has found it necessary to take in hand also the government of the region, for in matters of organisation the native races are for the most part little better than children When this state of affairs has come to pass, the British method of procedure has usually been to set up what is known as a Protectorate, in which the British power is supreme, but is used not only to protect

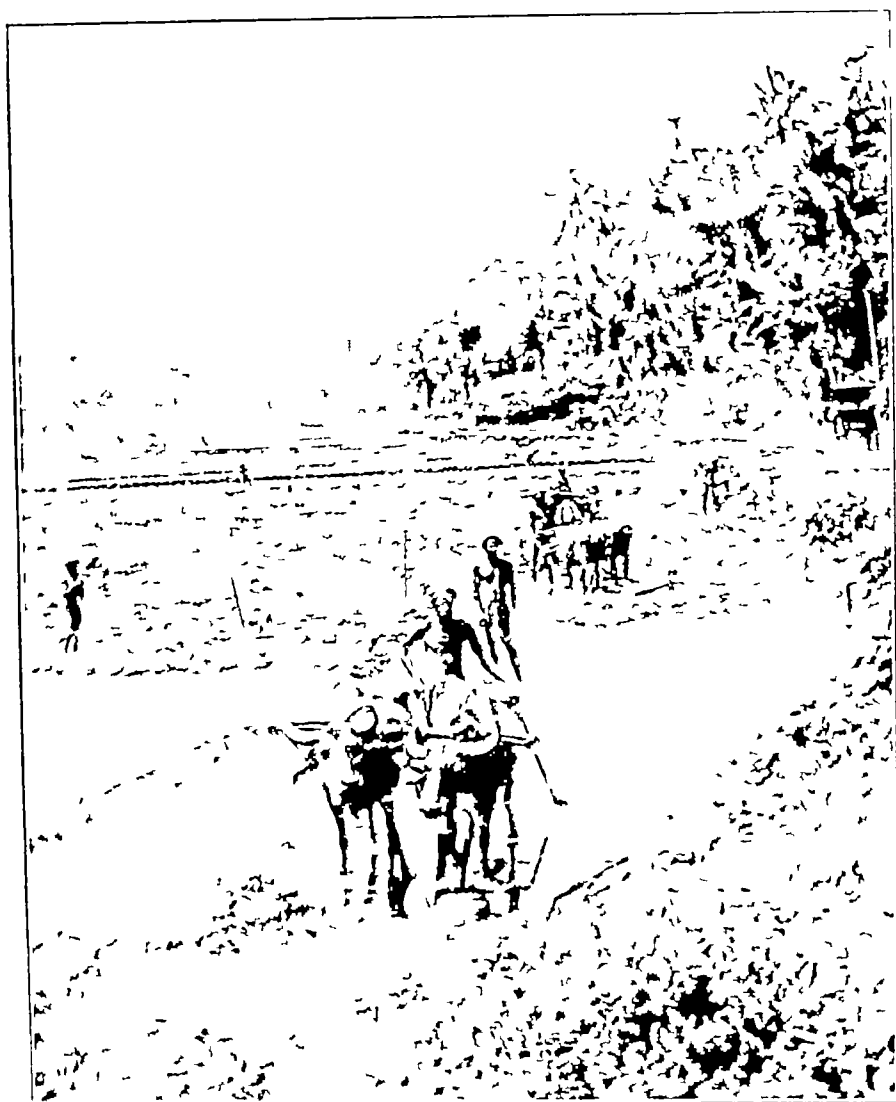
the British planter and trader, but also the native workers who are engaged on the plantation or in the export trade

The native races under the government of the British are of many kinds, and among the highest are some of those who live in the Indian peninsula and who belong to the same division of the races of the earth as do Europeans. We must take great care to distinguish these dark-skinned Aryan races from the blacks of Africa or Australia, for they are a proud people with a glorious history, capable of being educated in the Western manner, of undertaking intellectual and other work of the highest character, and of taking some share in their own government. They differ from the Indian peasants, most of whom are descended from inferior races, and are engaged in cultivating the soil by methods of a very primitive kind. There are also many hill tribes of Northern India who show personal qualities of bravery, endurance, and resource which are not always equalled by men of so-called "superior" race. Many of these have joined the British army, in which service is voluntary, and have fought for the Empire not only in Asia but in Europe.

The people of India are encouraged by their British rulers to live their own life, the children are taught reading, writing, and other elementary subjects mostly by native teachers who speak their own language, out of books prepared by British officials but mostly printed in India. The workers

on the land are encouraged to improve their methods of work in order that it may become more profitable to themselves, the forests are carefully supervised for the good of the people as a whole, relief is organised for those districts threatened with famine when the rains fail, newspapers and books are published in native languages and altogether, life in India is organised not for the selfish enrichment of the ruling race, but for the happiness and prosperity of the native peoples

The native races of New Zealand are the Maoris, who are a dark-skinned people, but very quick, intelligent, and capable of education according to the white man's plan. They form about 5 per cent of the total population, and though they are gradually decreasing as a race and losing some of their old hardy qualities, they form a very vigorous section of the community. There are many native village schools from which some of the pupils pass on to secondary schools and the university, while the Maoris are also represented in the Dominion Parliament by four members, for whom every adult native is entitled to vote in the district where he or she resides. Many of these Maoris live on rents derived from lands purchased by the British Government from their forefathers. As a rule, a larger proportion of those who have the vote exercise their right than in a British election! In North Island many of the Maoris live in native villages and in their own way, but in South Island large



TOUCHING THE RICE PADDY THE S.W. COAST, CEYLON

numbers of them live entirely in the European fashion

The Maoris are supposed by some writers to have been originally of the same race as the Pacific Islanders, many of whom are now under British government, for the Fiji Islands and other smaller groups in this region form part of the Empire. The Fijians are a black race engaged in raising bananas, cocoa-nuts, sugar-cane, tobacco, and rubber. Their capital is Suva, and the islands are in regular steam communication with New Zealand, Australia, and Canada. The south-eastern portion of the island of New Guinea, known as Papua, is part of the Commonwealth of Australia, and has a large native population of black race who were at one time very savage and warlike, but have now to a great extent settled down to peaceful habits under the influence of missionary teachers. Those who work are engaged on the plantations which produce cocoa-nuts for copra, rubber, hemp, and coffee, while gold production is an important industry, and there are promising copper deposits. Port Moresby, the chief outlet for these useful products, is in regular communication with Sydney. Copra, the dried kernel of the cocoa-nut, is largely used in the manufacture of margarine, and for other purposes.

The black population of the Malay Peninsula and adjacent islands under British government is also very large, and here again we find the same kind of work going on with regard to production, government, and education. This part of the British Empire is grouped as the Straits Settlements, includ-

ing certain islands and extensive coast regions in the neighbourhood of the Straits of Malacca. The Malays number about a quarter of a million people, but the Chinese are still more numerous, though these are to a great extent a shifting population, many of them returning to their native country when they have saved a little money. As in India, there are many native and English schools at which there is compulsory attendance of boys within a certain radius of the school building, and, on the whole, these are well attended. The native workers are engaged in the tin mines and on the plantations which produce large quantities of sugar, spices, tapioca, rice, rubber, gutta-percha, gum, copra, coffee, and tropical woods of various kinds. Singapore is, of course, the great trading centre.

The native people of South Africa far outnumber the whites, forming about four-fifths of the total population of the Union and including Kaffirs, Basutos, Zulus, Matabele, and Bechuanas, as well as Bushmen and Hottentots, who are not black but yellow-skinned races, and were the original inhabitants of the country. These people are engaged on all kinds of work, in the mines, on the farms, on the sheep and ostrich runs, and in the towns, where they find work of many kinds. Their children are educated in elementary and trade schools which are taught by native teachers, and higher education is also open to those natives who prove their fitness to receive it. The workers in the mines are carefully



138 THE PROGRESS TO GEOGRAPHY VI  
supervised and attended to, and Government in-



SCENE IN THE DE BEERS DIAMOND MINES, KIMBERLEY

spectors frequently visit their camps or compounds to ensure that every native who has a ground of

complaint of any kind shall have an opportunity of laying it before them The hours and conditions



WEST AFRICAN NATIVES AND MERCANTILE AGENTS

of employment are carefully supervised the sleeping quarters are inspected, the quality and quantity of the food is examined, and the mining authorities

are made to understand that every native labourer must be made as comfortable as possible

There are millions of black races living under similar conditions of British rule and protection in Rhodesia, Central Africa, East Africa, the Soudan, Nigeria, and other parts of this "black continent", all labouring to produce the goods which find such a ready European market, and coming more or less under the influence of British missionary teachers, learning the beneficence and strength of British law which is based upon justice rather than upon fear. The latest British Protectorate to be set up in this continent was Egypt, which contains a native population mainly employed in the cultivation of the land largely under British direction and helped by British engineers whose management of the Nile in the interests of the *fellahin* is one of the wonders of the civilised world. There are many native schools in this country also, and attempts are being made by British officials to give the Egyptian children education of such a character as will help them to make the best of their own conditions of life. In the year 1922 Egypt was given a self-governing constitution and was declared to be a free and independent sovereign state under its own native king, and influenced by Britain only so far as concerned the interests of the latter country.

In this rapid review of the native races living under British rule we must not forget the dark-skinned workers of the West Indian plantations who

send us sugar, cotton, bananas, rubber, tobacco, coffee, cocoa, pineapples, and other tropical fruits. Many of these people are descendants of the African negroes who were forcibly taken from West Africa to work in the American plantations because there was no cheap labour in that continent. In the West Indies, too, the black children are educated, and the Government supervises the conditions under which the planters and other employers of black labour carry on their business.

# PART III

## THE WORLD'S LEADERS

### NATIONAL POWER

WE have formed a habit of classifying certain nations of the world as Great Powers, Lesser Powers, and "spheres of influence," or into First-Class Powers, Second-Class Powers, and the rest of the world. After the War some people were a little impatient with the "Powers" who had plunged humanity into such a catastrophe, and there was much talk of "self-determination" among races powerful and not so powerful. But even this did not obscure the fact that a number of great and powerful nations still dominated the world, and in a greater or less degree manage its affairs among themselves. The pre-war Great Powers were eight in number, namely Britain, Germany, the United States, Italy, France, Russia, Austria-Hungary, and Japan. After the Peace, Germany, Austria, and Hungary became very Lesser Powers indeed, while Russia was, for a time, shut out from the councils of the nations.

It is interesting to make an inquiry as to the origin of the power of these nations. Each was a collection of many millions of people, Russia taking the lead, and being followed by the United States, Germany, Austria, Japan, Britain, France, and Italy roughly in this order. But India had three times and China four times as many millions as Russia, and neither of these countries was a great independent world-power.

Each of the eight leading nations had vast natural resources, fertile lands, great wealth of minerals, extensive forests, and valuable fisheries, but so also had China and India and Brazil and Spain, and these were not numbered among the Great Powers of the earth. I think that we must get back to the character of the people who constituted the Great Power, and this character was very largely, as we have seen in an earlier chapter of this book, a matter of climate and physical surroundings. It is a noteworthy fact that the original or home territory of each Great Power lay within the North Temperate Zone while in the South Temperate Zone the most useful lands were those which formed part of the British Empire, namely South Africa, the best parts of Australia and New Zealand.

Given a climate of this kind combined with a favourable geographical situation and rich resources of soil and rock, a nation will develop "greatness," even if it does not belong to the White Races, for Japan which is peopled by a nation of Yellow Race,

is now among the Great Powers, though she has taken her place in their ranks by adopting their methods in peace and in warfare. Of course a Great Power must also be a nation knit together by unity of purpose, and well led by leaders whom it trusts, but this, too, is a matter of personal character, which is largely a matter of climate and physical surroundings.

I have already drawn your attention to the great geographical difference between the British Empire and the other great Empires of history. The former is what we might call a sea-state, being made up of territories scattered about all over the world, and without these extensions Britain would probably lose her place as a Great Power. France has also wide colonial territories, without which her position in the scale of world-power would be lowered considerably. But, on the whole, the other Great Powers were land-states independent of over-sea extensions for their great position in the world. Berlin was the geographical land centre of the German Empire, in a way that London can never be the centre of the British Empire. Russia was and still is a compact state whose parts are contiguous. Vienna was a real land centre of Austria, Rome of Italy, and the United States forms a solid mass of land stretching like Russia from ocean to ocean. Japan forms a group of small islands, and wishes for extension, but if she ever obtains her desires her continental territory will doubtless be close to her own shores. When

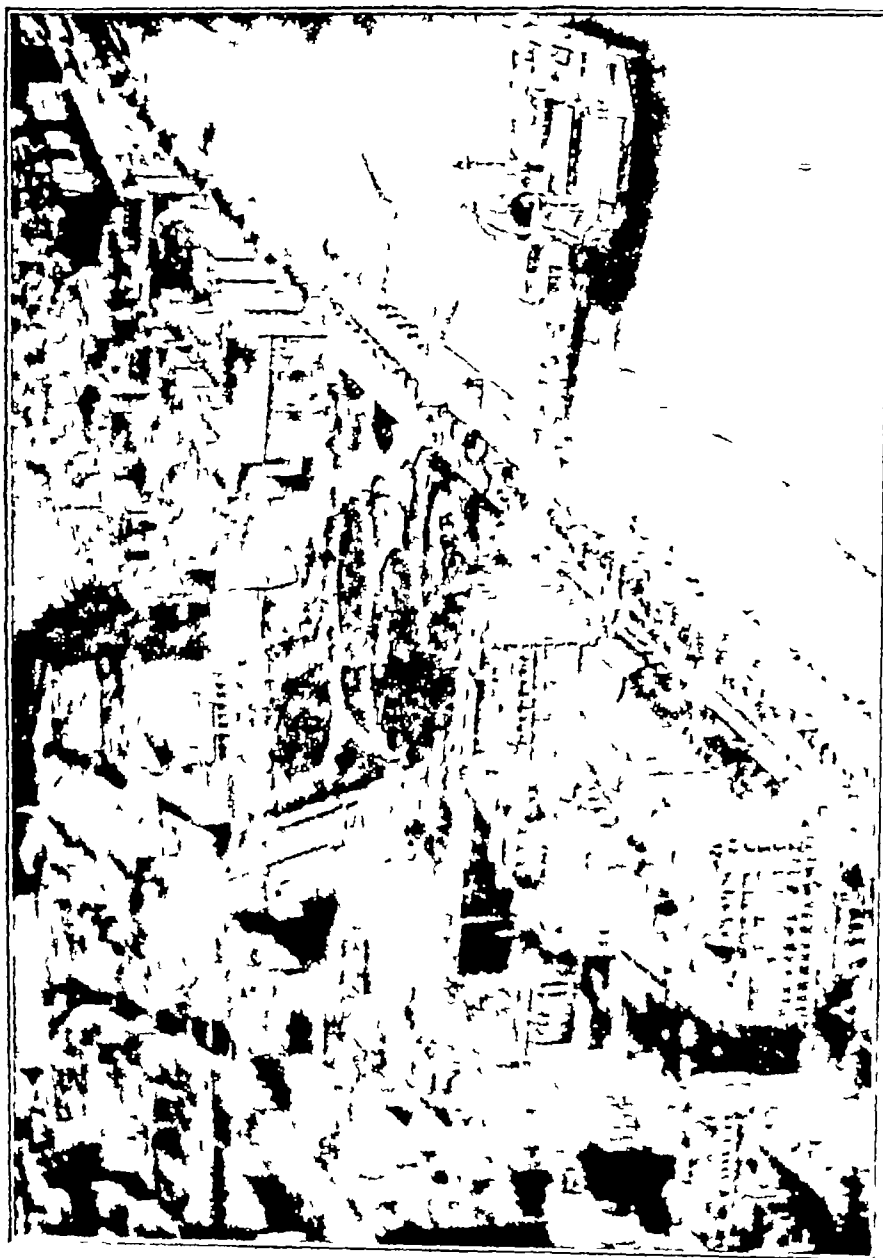
we compare the Great Powers from this point of view, it is easy to see why Britain has become, or has been forced to become, the greatest naval power of the world, not from vanity, nor from desire to dominate the world, or even to be "mistress of the seas"—a silly phrase without any real meaning—but as a mere matter of safety, and indeed of national existence. For the same reason Britain has become the leading country in the matter of ocean commerce, sea carriage, and shipbuilding. This also is a natural and peaceful outcome of her geographical situation, and she is quite prepared to welcome rivals in peaceful enterprise, and, so to speak, to "take off the hat" to a nation which can beat her at what geography has made her own game.

Each of the Great Powers had its own characteristics, which were of an intensely interesting character. Britain, as we have seen, is the great sea-state and workshop, enormously wealthy as a nation, with trading and money interests in every quarter of the globe. Politically she is a land of freemen who have an innate objection to being dragooned but are, on the whole, quite ready to do their duty to their native land of their own free will, provided that the burden of service is fairly distributed. Germany was a great land-state cleverly organised and completely drilled, very wealthy owing to her natural resources which combined with national energy, had made her a great scientific



workshop, and desirous of finding outlets for her growing population, which meant, as she thought, becoming a great sea-power like Britain, though geography did not point in this direction as with us. Politically, she was a land of obedience, whose people were quite content to be drilled into patriotism, but who stood before the war in the matter of what we call "freedom" where England stood in the time of James I, with his doctrine of the so-called "divine right" of kings.

France is not so easily described in a paragraph. Politically, she may be said to have gone farther than Britain, for her Great Revolution swept away kings and aristocracy, and, while the Briton stands up for "king and country," the Frenchman raises his sword to "La Patrie" only. She is a land of clever engineers, tasteful workers in all departments of industry, a land of new ideas and better methods, of sunshine and fertility, of busy work relieved by ease and pleasure, enjoyed as a right and with a light-heartedness of which a Briton would be, for some strange reason, half ashamed. Her national qualities are somewhat akin to those of the Italians, who, as a composite and united people, form a new unit among the nations. Here, again, we have the same skill and taste, the same passionate devotion to the idea of nationality and love of pleasure as in France, with, perhaps, more of the hot-blooded passion which is so largely a product of climate, and less of the energy which has the same source. In Austria, now



fallen so low among the nations, we had, as geography would have led us to expect, a blend of the energetic qualities of the Teuton with the taste and delight in beauty of the French and the Italians. But the nation lacked unity as a consequence. We cannot picture the Austrian type so readily as the British, the German, the French, or the Italian—we cannot mark him off so clearly from the rest of the nations.

Russia was and still is a baffling enigma. Politically, she seemed to stand where we stood in the time of Charles I, or even earlier, while some of her western cities had all the modern activity of Berlin, Paris, Vienna, or London, though this was due more to Jewish and German and British influence than to the Russians themselves. There was, however, a separate Russian nationality which was making itself felt, in spite of the foreign money used to develop her great natural wealth, and of a royal house which was not Russian but German. Suddenly this royal house was swept away and Russia stood politically, not side by side with advanced Western nations, but far ahead of them in political experiment. Her government was taken in hand by the "workers" and soldiers, who would have nothing to do with brain-workers, and the much-praised Western Parliament was superseded by the Soviet.

The Russian of the present day stands for love of the soil and its possibilities, which in this great

country are enormous. The Russian peasant makes a great deal of the Easter festival, which is also a matter of climate, when you come to think it out, and I like to think of his country as a land of resurrection, of hope and joy and life springing from darkness and sorrow and despair, of spring succeeding to the long gloom of winter. The nation, too, has awakened from sleep, and may be said to be rubbing its eyes.

America is also difficult to describe in a few words, partly because she is a composite nation made up of many European elements—British in political ideas, but without her aristocracy or monarchy, Teutonic in her energy, her engineering skill and industrial progress, with other characteristics drawn from other nations. On the whole, America stands for peace, and this is largely a matter of the blend of European races of which I have spoken, and her consistent aim is, as far as possible, to keep herself outside of European quarrels, while she has declared, through the mouth of one of her former Presidents named Monroe, that she will resist to the utmost any attempt on the part of the Great Powers to take possession of territory on the American continent other than that already held by Britain. Japan is the newest of the Great Powers, and she stands in the East for artistic taste combined with mechanical ingenuity, as does France in the West, while she may be said to be a Pacific power, allied to Britain in her geographical situation.

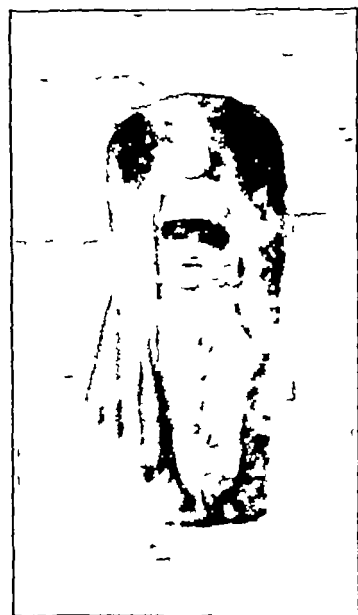
## THE UNITED STATES OF AMERICA

## I

WHEN we speak of "the American flag" or of "the American people," we mean the flag and the people of only one part of North America, which is known as the United States. The fact that this country has taken to itself the name which really belongs to two continents is a testimony to its greatness in those two continents, and the high position of its people among the nations of the world. When a man says, "I am an American," we at once understand him to mean that he is a citizen of the United States, although North America also contains a most important portion of the British Empire, as well as the republic of Mexico, while South America is made up of a number of republics of considerable importance to the world at large, so far as food-supply is concerned.

The name "United States" is worthy of a little particular attention. It speaks of a country made up of a number of states which are more or less independent, but are united for purposes of government. The great size of the country makes its divisions more marked than, say, the counties of little Britain, and an "American" will always tell you that he is "from Missouri" or "from Virginia", for, as we shall see, the differences between the various parts of this wide country are

very distinct, and this fact is emphasised in the name given to the whole confederation of states. But there is a decided emphasis upon the word "United" also, for your history books will show you how this country was gradually built up of states settled at various times and in various parts of the Atlantic regions, how the Northern States developed on different lines from the Southern States for geographical reasons which we are to consider, how the Southern States wished to form a separate confederation of their own and how the Northern States were determined that there should be one nation under one central government from ocean to ocean, and from the Canadian



A. L. L. L.

boundary to that of Mexico and how after a bitter Civil War between North and South the Union was firmly established each state with its own powers of self-government but all joined together under the central Government at Washington at the head of which was the man who in some ways has more control over men's lives than many princes of the Old World the President of the United States.

wealthy, and influential must be intensely interesting, for we must not forget that the character of the nation which determines its place in the world is largely the product of the physical character and climate of the land in which it makes its home. A reference to a map of the world will show that the United States lies in the same latitude as Central and Southern Europe, the Mediterranean Sea, and North Africa, as well as the interesting fact that Great Britain and Northern Germany are considerably nearer to the North Pole than the most northerly portions of the United States. Our habit of looking at maps of single countries obscures these matters, as well as the fact that the latitude of New York is somewhat similar to that of Naples and Constantinople. Yet the north-eastern portion of the United States has more severe winters than Britain, partly because the latter country lies in the path of a warm ocean drift<sup>1</sup> which flows in a general north-easterly direction across the Atlantic from the Gulf of Mexico, partly also because this north-east corner of "the States" is exposed to the cold northerly land winds from the Arctic regions. When we note the comparative latitude of the Southern States of the Union, we are reminded of the great cotton crop which means so much to our industrial

<sup>1</sup> The Southern Atlantic States of the Union are influenced in the matter of climate by this same drift while the Northern Coastal States are affected in the opposite direction by cold currents which come from the neighbourhood of Labrador and creep round the "shoulder" of the continent, helping to freeze the Canadian harbours and carrying the Arctic icebergs right into the track of transatlantic liners.

and even to our national life, as well as the American or "Virginian" tobacco which is so evident in our shops and advertisements. The map of the world shows at a glance the regional or place connection between the cotton and tobacco of the United States, and the cotton and tobacco of Egypt and other parts of Northern Africa.

Of course, we must make allowance for the effect of relief upon climate, and we must beware of drawing parallels in products from mere measurement of distances from the Equator. The climate of the United States is a thing of infinite variety, partly because of the great extent of the country from north to south and from east to west, partly because of the presence of great mountain ranges. These are highest in the western part of the country, in the region of the Rocky Mountains, which extend from north to south throughout the whole country, and which contain many lofty peaks and deep gorges or cañons. To the east of this mountain range lies the broad basin of the Mississippi-Missouri which is separated from the Atlantic sea-board by the Appalachian Range. From the Rockies to the Pacific coast there are several north-to-south ranges with broad valleys between them. There are a number of comparatively useful rivers flowing from the eastern range to the Atlantic among which the Hudson is the most important while the Columbia is the only stream which breaks through the western ranges and is navigable for some distance eastwards.



from the Pacific. As we might expect, population is most dense on and near the Atlantic sea-board, in the basin of the Mississippi-Missouri, and in the Pacific region.



COWBOYS BRANDING CATTLE MEXICO

Leaving out the mountain lands and a broad arid region in the south-west of the country, we have a wide area capable of supporting an enormous population, and as yet, in spite of the crowded cities of west and east, only half occupied and developed. But even at this early stage in the country's history

we are faced by the stupendous facts that the United States produces one-fifth of the world's wheat, one-fourth of the oats, four-fifths of the maize, three-fifths of the cotton, three-fifths of the copper, two-fifths of the gold, two-fifths of the coal, iron-ore, pig-iron, and steel respectively, one-fourth of the number of horses, two-fifths of the number of pigs, and one-fifth of the cattle, to say nothing of three-tenths of the tobacco, which is not really one of the necessaries of life. The country also feeds one-tenth of the sheep and produces one-tenth of the world's wool, while the output of lead and petroleum is greater than that of any other country. These products come mostly from the Eastern and East-Central States (except gold), but, as I have already said, the wealth of this great country has, as yet, only been partially developed, and the railways are opening out fresh fields for enterprise every year. The coal and iron trade is at present localised in the valley of the Ohio River to the south of the Great Lakes. The cotton crop comes from the states round about or near to the Gulf of Mexico, the tobacco from Virginia and other South-Eastern States, the wheat and other grain from the North-Central States, while the sheep are reared mostly on the eastern slopes of the Rocky Mountains and the horses, cattle and pigs where maize is grown—that is to say mostly in the neighbourhood of Lake Michigan. The silver, gold and mercury come from the Western States, while the

petroleum wells are mostly in California, Illinois, and Oklahoma

Such an energetic and productive country requires a perfect network of communications, and reference should be made to a map to gain some idea of the way in which the various portions of this country are joined up one with another. In making note of the great railway lines you must not forget the rivers, and especially the useful water-system of the Missouri-Mississippi-Ohio, and the Great Lakes, of which Michigan is entirely in United States territory, as well as the western shores of Lake Huron and the southern shores of Ontario and Erie, the last-named inland sea being joined to the Hudson River by the Erie Canal. The United States is also intimately concerned with the two canals between Lake Superior and Lake Huron, as well as with Welland Canal, by means of which it is possible to avoid the Niagara Falls, for through these waterways there is a great deal of traffic between the lake ports of both these neighbouring countries, the total amount being about one-third of that which passes through the Suez Canal.

We must note carefully that the United States has a very strong position as a nation, owing to the fact that it lacks very few of the outstanding necessities of its life, or that it is, to use the recognised term, "self-contained." It has become a great mining and manufacturing country, without devoting energy to these things at the expense of agriculture. It

grows much more than sufficient grain for its own uses, without doing so at the expense of the pastures on which cattle can be fed or sheep reared. This is, of course, largely owing to its great area, roughly twenty-five times that of the United Kingdom, which allows for wide differences of climate, owing not only to latitude but also to elevation. Other countries like our own must look to "colonies" far away for certain necessary products such as cotton, petrol, etc., which the United States produces within her own borders. She has no tea, it is true, but then tea has not become such a "necessity" in this country as it has with us.

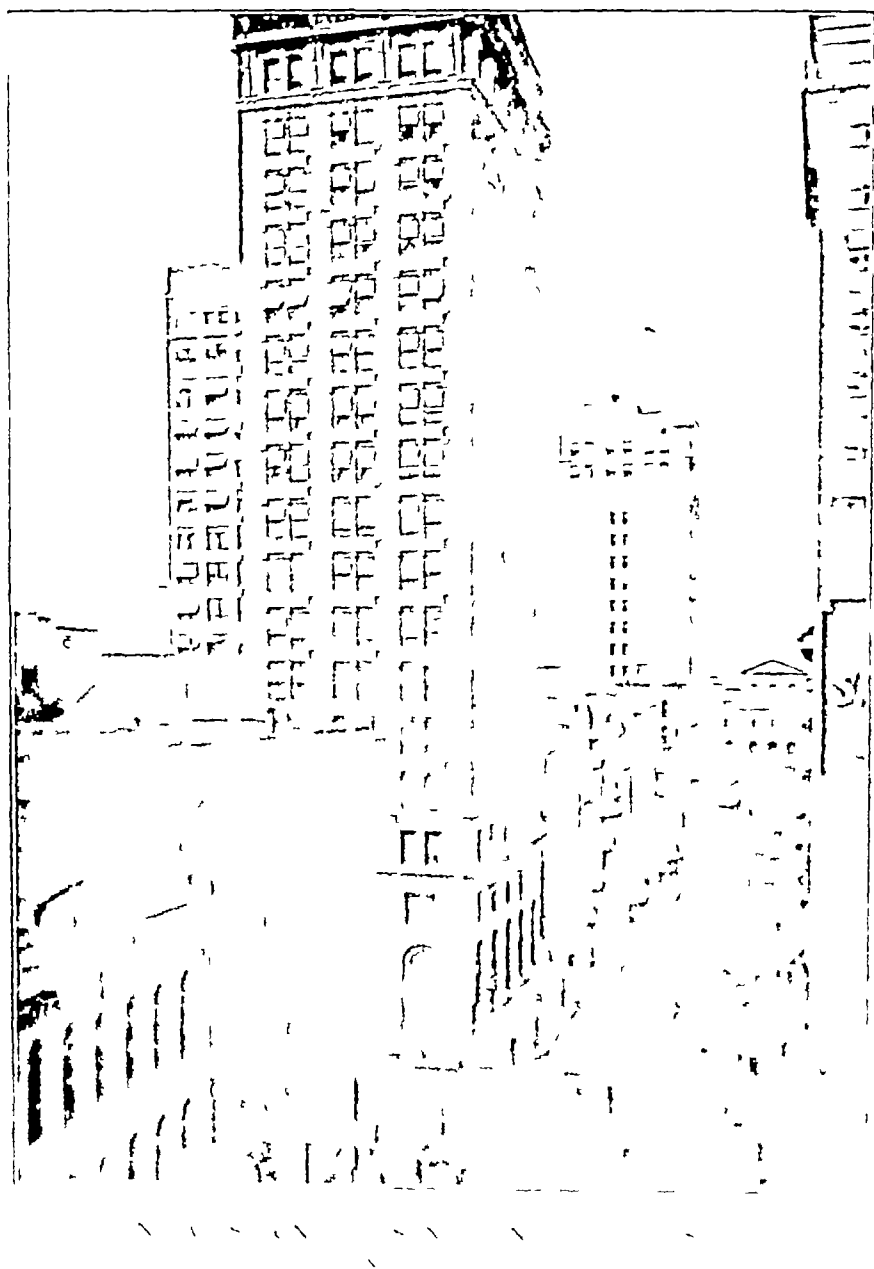
## II

New York, Chicago, and Philadelphia together have a population of about ten millions, which are shared by the three leading cities in the proportion of 5 : 3 : 2, while the suburbs of the first-named city contain no less than five and a half million people. New York may therefore be said to dominate the United States commercially, as London dominates Britain and the Empire—though the government is not conducted in this great city on the Hudson, but at Washington which does not rank among the largest cities, but has a population about equal to that of Leeds.

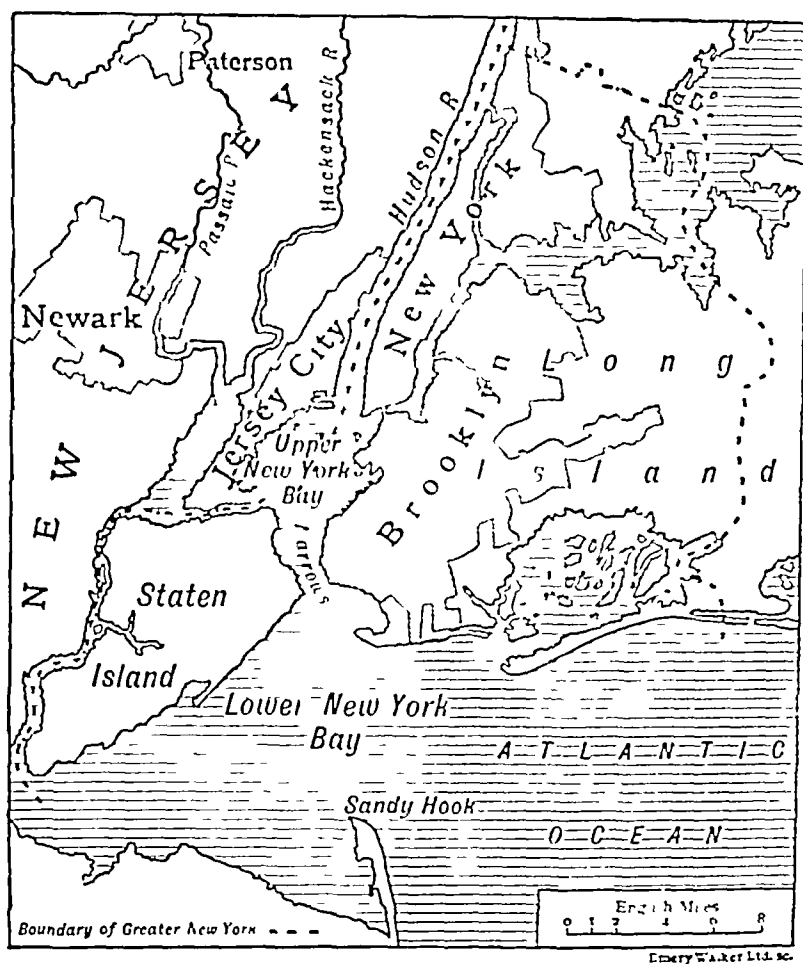
About half of the external trade of the United States passes through New York, which has commercial dealings with every part of any standing in

the world. It is the great collecting centre whence the products and manufactures of the country are sent out, and the returns which show its trading operations prove that it defies geographical situation, for it has more trade with the republics of Central America than has New Orleans, while it is much more important in the Pacific trade than San Francisco, and has by far the largest share in the commerce with South America. The opening of the Panama Canal is expected to increase this enormous commercial activity, and it remains to be seen whether New Orleans will develop at the expense of the trade capital. It must be remembered, however, that New York stands nearer the coal, iron, petroleum, and wheat, nearer to the densest population, nearer to the Old World, and at the head of all the lines of communication by canal, river, rail, and lake. The greatest outside trade is done with the United Kingdom, about one-fifth of the whole in ordinary times, and before the War Germany came second, with France as third in the commercial race, but Canada and Japan have now overtaken Germany and France.

The city where all this business is carried on must have developed many interesting characteristics. Its situation was not chosen for expansion, for it is built on an island between the Hudson and East Rivers, and it has been necessary to establish extensions, the chief of which are known as Brooklyn, Jersey City, and Hoboken, beyond these streams,



and to connect them with the central part on Manhattan Island by means of bridges, under-river



NEW YORK

The broken line shows the extent of Greater New York

tunnels, and tube railways. In the central island itself the traffic is very close and complicated, that of the street being relieved by overhead railways

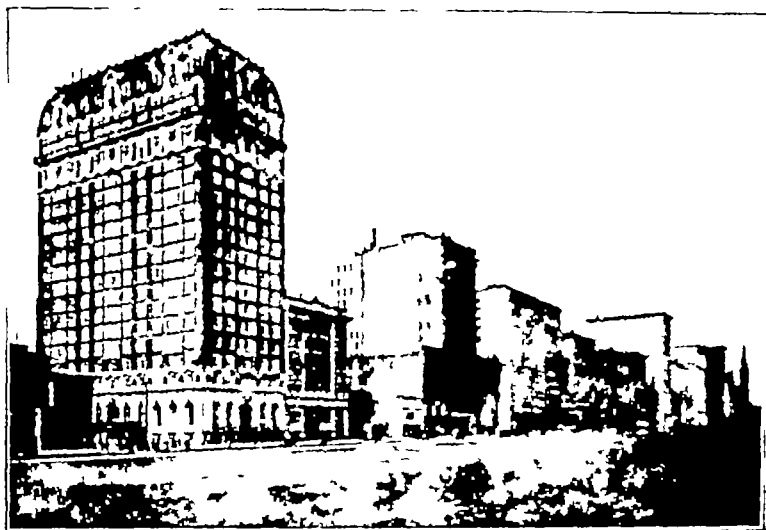
and by "tubes" at varying depths. The lack of sufficient surface area has also caused the development of "sky-scrapers," buildings of twenty or more stories which tower into the sky, and make the streets between them like wind-swept gorges of the Rockies.

Washington is a city of a totally different character, forming the Government capital and situated in a small "district" known as Columbia, on the Potomac River, about 225 miles from New York. It is a city of many beautiful buildings, at least in the newer portion—of parks and gardens, with tree-lined streets, and having, on the whole, an air of detachment from the rush and business of the great centres of industry and commerce which it controls. The Capitol, in which the United States Congress meets, is a splendid building crowned with a spacious dome, surmounted by a statue of Liberty. Compared with the palatial Government offices—some of which are built of marble—the President's house is very modest, being a plain painted stone building known as the White House. The city and its halls are full of statues erected in memory of great Americans.

George Washington. Abraham Lincoln. Benjamin Franklin. Admiral . . .



One of the leading cities for making fortunes, and second after New York, is Chicago, which stands near the head of Lake Michigan, and rather more than 900 miles from New York, with a lake frontage of over 25 miles in extent. The city has the largest grain market in the world, and is specially noted for its trade in pigs, pork, bacon, and lard. It is



(Fig. 1) — Chicago Buildings

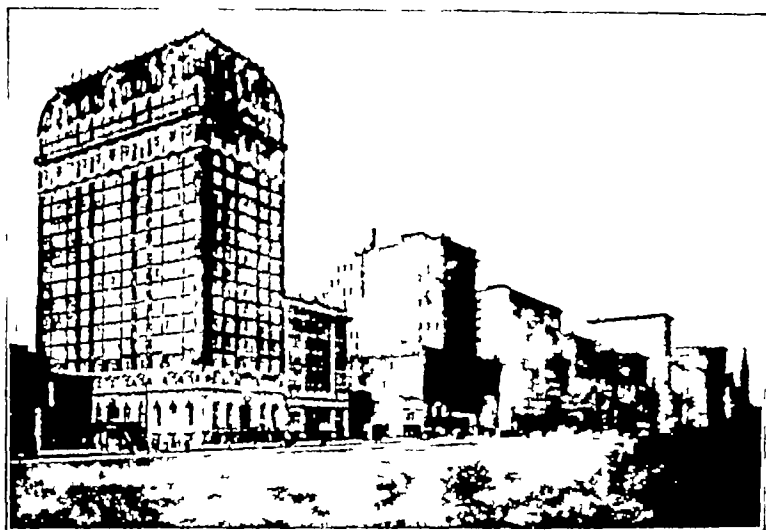
CHICAGO—TALL BUILDINGS ON THE LAKE FRONT

a place of sky-scrapers, fine buildings, straight streets, rush and activity, feverish work relieved by more or less boisterous pleasure. Chicago is also a university city, famous for its observatory and fine library. It has much business, but has not neglected the health of its people, being well provided with parks and open spaces. Its history as a city dates only from 1837, but since that time it has grown

with great rapidity, owing to its favourable situation for transport by rail and water. About one-third of the railway business of the States centres here, while Lake Michigan and its connections place the city in direct communication with the open sea, and it is possible for large steamers from European ports to find their way to the wharves of Chicago.

Philadelphia, the third city of the United States, is known as the "Quaker city," and stands on the Delaware River, about 100 miles from the ocean and about 90 miles by rail from New York. This is not a place of sky-scrapers and flats but a "city of homes," more like those in the Old World of houses mostly built in the solid, substantial Quaker style. For Philadelphia is the "city of brotherly love" founded by William Penn in the time of King James II., and is as much noted for learning as for hustle and world-commerce. Its present prominence is largely owing to its manufactures of rolling-stock for railways, carpets, woollen and worsted goods, upholstery, cotton goods, iron and steel goods, and chemicals, as well as for its sugar and oil refining. Philadelphia is the rallying point in the American War of Independence, and it was in Independence Hall that the Declaration was adopted in 1776, which is the birth

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*P. L. L. B. B. V. I.*

CHICAGO—TALL BUILDINGS ON THE LAKE FRONT

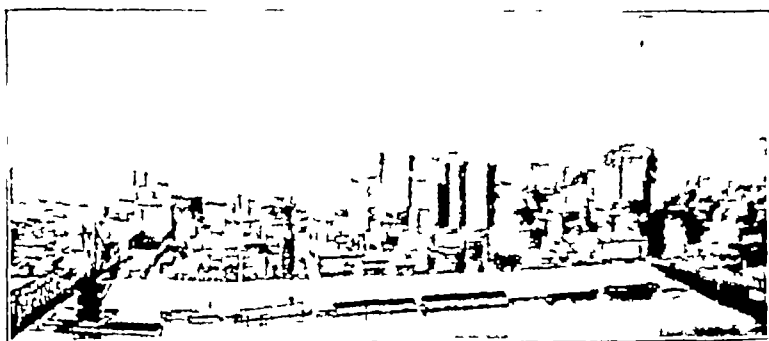
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Another historic city, with far-reaching present-day influence, is Boston, on Massachusetts Bay, at the mouth of the Charles River, and about 230 miles

by rail from New York. Not far away is the city of Cambridge, which contains Harvard University, famous all over the world for its learning and the close connection of its courses of study with every-day life. Boston is one of the chief educational and literary centres of the United States, and indeed of the civilised world, and most of the great writers and thinkers of the country have in some way been connected with the famous university city. It is,



PITTSBURG

however, not a sleepy, bookish place, but a very busy port, with foreign trade only second to that of New York in value, and it forms the chief wool market of the country. It is also a very busy manufacturing centre, and has a government navy yard. Boston and its neighbourhood played a prominent part in the American War of Independence, as your history books will remind you.

Pittsburg stands at the headwaters of the Ohio River, about 450 miles from New York and Chicago. It was known in the early colonial days as the

"Western Gateway," where traders and prospectors congregated, and whence they made their way down



*(The Interview)*

A BAR (90 FEET) OF HOT STEEL IN THE ROLLING MILL AT STEEL WORKS  
PITTSBURGH PENN. U.S.A.

the Ohio to the unknown regions of what was then known as "the West." The city was really founded by the British in the year that Wolfe took Quebec,

and was named after the great statesman William Pitt. It is now one of the leading "workshop" cities of the United States and of the world, having rich deposits of coal easily accessible in its neighbourhood, and though it is really another Birmingham it is not a smoky city, for not far away natural gas is obtained by drilling in the earth, and is used for lighting, cooking, and manufacturing purposes, for which it makes an excellent smokeless substitute for coal. This is the great steel city which has manufactured so many millionaires, and its favourable central situation has also made it a great distributing centre, no less than six trunk lines having termini here. The river traffic, carried on by small steam vessels and barges, is also very great.

On the Pacific coast the largest city is San Francisco, which ranks twelfth among the great centres of population of the country. It lies on a spacious land-locked harbour, entrance to which is by a gap of only a mile in width, known as the Golden Gate. The region is subject to earthquakes, but in spite of this drawback has developed a great trade, and is the western terminus of the trans-continental lines from the largest eastern cities, being about 3500 miles from New York. San Francisco is the outlet of an important mining region, and gold and silver are among the leading exports, while grain is also largely handled, enormous quantities of wheat being sent out every year. Shipbuilding is increasing in importance.

It is worth noting here that before the war the United States took fifth place as a shipbuilding country, but in 1921 it was easily second, and not very far behind the United Kingdom

## THE JAPANESE EMPIRE

### I

SEVEN of the Great Powers of the pre-war world were of Aryan or White Race. The Japanese belong to the Yellow Race, though it has already been noted in passing that they have taken their place among the Great Powers, largely by adopting their methods in peace and in war. Their advance, however, is highly interesting to the student of race, as it proves that the personal qualities necessary for taking a high place among the nations of the world are not to be found among the White Races only, indeed, the White Races can learn many a valuable lesson of patriotism, pluck, and, perseverance from the Yellow Races as represented by the people of Japan, and they may have another lesson to learn from China.

The Japanese have learnt a great deal from the British in matters of industry, commerce, and sea-power, and would be the first to acknowledge the debt. They also learnt much from the Germans in matters of land war. They have been called the "Britons of the East," and though the phrase is

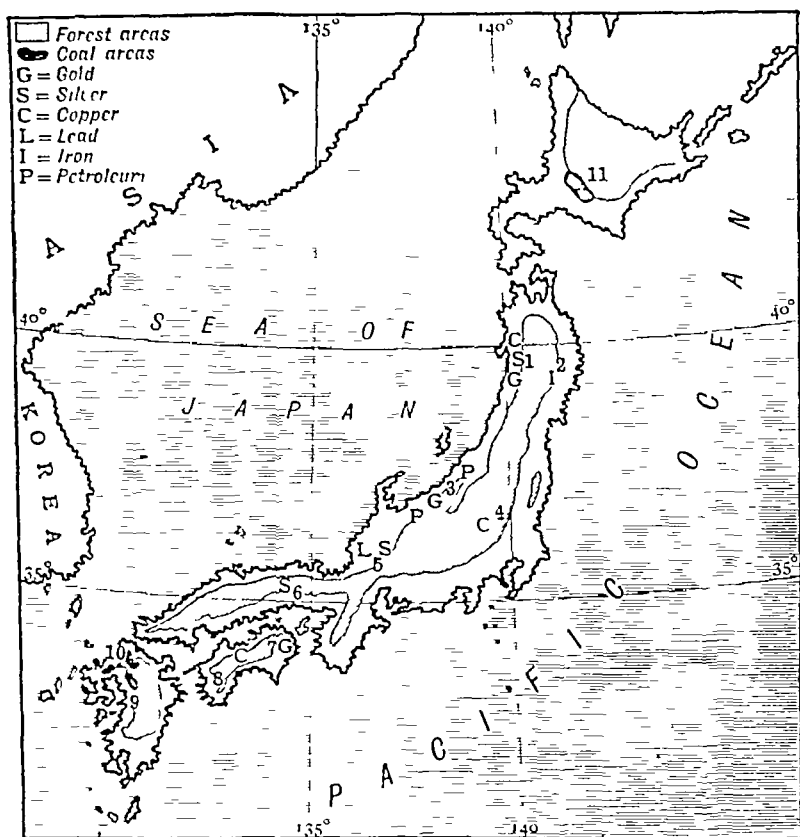


rather misleading, it has some basis of fact. In the first place, like ourselves, they form an island nation, and their original home is not of great extent, being only about half as large again as our own. In the second place, their country is situated on the margin of the ocean, and facing both the United States and Canada. In the third place, the Japanese make excellent sailors, partly because so many of them have had a good water training in their fishing industry, just as our navy men are largely recruited from our fishing towns. In the fourth place, the comparatively small Japanese islands are about as densely populated<sup>1</sup> as our own, the largest number of people finding a home on what is known as the Mainland, or Hondo or Honshu, which is the largest island, and about the same size as Great Britain. There are, moreover, other points of similarity, which you can trace for yourselves as I go on with my account of the country.

The Japanese islands lie considerably nearer to the Equator than the isles of Britain, and are separated from the continental mainland by the Japan Sea, the nearest part of Asia being the peninsula of Korea, from which the southern islands of Japan are separated by the Korea Channel, which is about eighty miles across in its narrowest part. A chain or ridge of highland runs through the length of the islands, nearer to the west than the east coast, and

<sup>1</sup> The population is almost equal to that of the white population of the British Empire.

the rest of the country is also considerably elevated, the only lowlands being the river plains and the narrow strips of coastal land. This is the cause



Emery Walker &amp; Co.

## JAPAN FORESTS, MINES

Under Legend Districts

- |             |          |            |            |             |         |
|-------------|----------|------------|------------|-------------|---------|
| 1 Aomori    | 2 Iwate  | 3 Niigata  | 4 Tochigi  | 5 Gifu      | 6 Hyogo |
| 7 Kagoshima | 8 Yehime | 9 Kumamoto | 10 Fukuoka | 11 Hokkaido |         |

of the dense concentration of population in certain limited areas, and of the backwardness of the country with regard to live stock, there being comparatively

few cattle, horses and pigs in the country, while fish largely takes the place of meat in the daily diet. Whatever else the Japanese are famous for, it is not their horsemanship. Horse-racing did, indeed, become popular after the war with Russia, and was encouraged by the authorities in the hope of improving the breed of Japanese horses, but the popular interest was centred more upon the betting than upon the quality of the horse-flesh. It is interesting to note that Japan's old adversary Russia stood easily first among the horse-breeding countries of the world (with the United States a good second), while Japan herself came near the bottom of the list. The relative positions of these three countries with regard to sheep were somewhat similar, except that Japan was out of the list altogether when these animals are compared in millions. This is a matter which can readily be connected with the physical character of each country. Indeed, if we were told these facts about the domestic animals to begin with, we could easily deduce the general character of each country.

The Japanese woman who wishes to gain a reputation for personal beauty takes care to arrange her hair in such a manner that she obtains a "Fuji forehead," that is to say, so that the outline of the hair upon the brow makes a curve which is supposed to resemble the shape of Fuji-yama,<sup>1</sup> the sacred

<sup>1</sup> Fuji-yama the loftiest mountain in Japan stands at a height of 12,365 feet about 60 miles to the west of Tokio and is visible from fourteen provinces as well as from far out at sea. It is a volcano with a deep crater

mountain of Japan This snow-capped volcanic cone is to be seen in the background of almost all Japanese pictures, and it reminds us that this country is subject to earthquakes, about a hundred and fifty occurring in the course of an ordinary year Houses



*[Photo Underwood*

*IN A JAPANESE GARDEN, KYOTO*

are therefore built mostly of wood and plaster, usually of one story in height, the outer walls resting on a low stone course, and the floor standing about

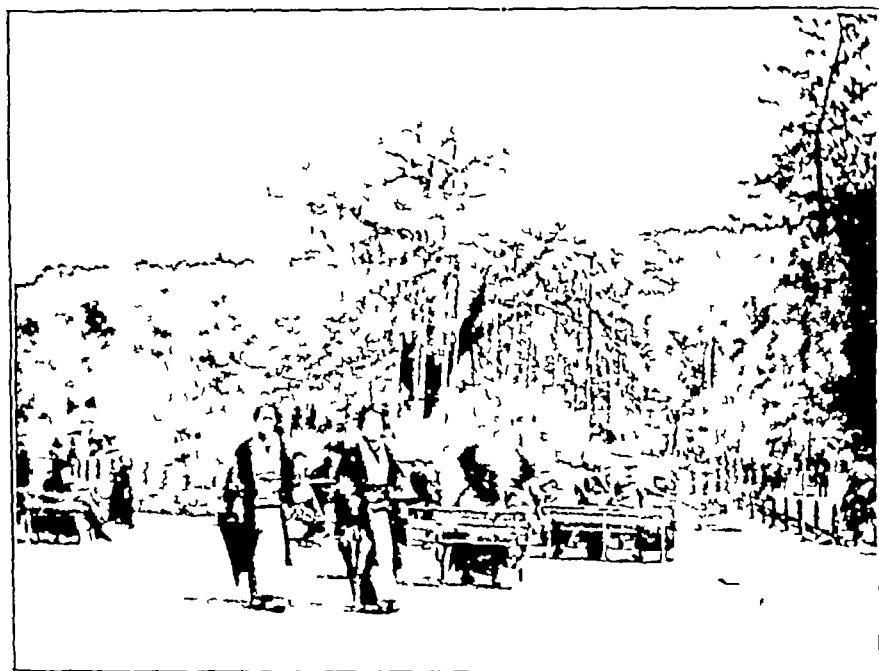
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measuring about 2 $\frac{1}{2}$  miles round and its last eruption took place about 200 years ago Tradition says that it rose in a single night, and it is the object of frequent pilgrimages on the part of the Japanese The pilgrims have a choice of five paths to the summit, at the side of which are set numerous shrines and temples

two feet from the ground. The whole structure can be lifted bodily and removed to another site, and when an earthquake shock occurs, the damage done to the houses is usually very slight. The furniture of the house is also very simple—thick straw mats for squatting upon by day or lying upon at night, a low stool in place of a table, and a small brazier or stove in which charcoal is burned. The rooms are separated from each other by means of screens made of paper-covered frames, which can be removed to convert the house into one large room. We see, then, what a great influence the climate has upon the ordinary everyday habits of the people, and consequently upon the appearance of a Japanese town or village, which is like nothing else in the world.

Japan is, on the whole, a sunnier land than our own, having about the same average of sunshine as France, and its temperature is higher than that of Britain. The rains, which are copious enough, fall mostly in the warm months, when there are also frequent storms known as typhoons, Japan lying in the direct track of the most frequent North Pacific storms, which are sometimes more destructive to life and property than the earthquake shocks. The heavy rainfall has made the islands a region of dense forest-land, and only the river valleys are free from trees, while in the lowlands there are frequent floods, which are in many places utilised for the cultivation of rice. Japan grows about one-ninth of the world's rice, and is the third great

rice-growing country in the world, India and China leading the way in this matter, and producing together about eight times the quantity grown by Japan. It is worth noting that these countries export only a small proportion of the rice which



[By courtesy of the T. & O. S. N. Co.]  
MARUYAMA PARK, KYOTO

they grow, for the grain is mostly required for the sustenance of the dense populations which are to be found near the rice-fields. Very little of the world's yield of wheat, barley, and rye is raised in Japan, and still less of the oats, for these grains require a temperature which is not too moist.

In spite of the small yield of cereals, however,

Japan is before all else a farming country, though the work of its agriculturists differs greatly in kind from that of our own. This country stands fourth in tea production though its yield is small compared with that of India, China and Ceylon. The tea plant requires a heavy rainfall evenly distributed throughout the year, and as we have already noted, the distribution in Japan is not very regular. The combined moisture and warmth of the climate are favourable to the growth of tobacco, and Japan is one of the leading countries in the world in this production, while she cultivates the mulberry tree very extensively, and is one of the leaders in silk production also. The Japanese silk export has had a great effect upon the silk trade of France, and even of Italy, partly because the Japanese silk-weaver works for very low wages. An interesting product of this country is lacquer, a kind of resinous varnish prepared from the lacquer tree, and used for giving a fine hard polish to various articles of wood and other material. In the Pacific island of Formosa, which is part of the Japanese Empire, an enormous quantity of camphor is produced from a certain sub-tropical tree, as well as a great deal of camphor oil. The Japanese farmers, therefore, are busy enough with many varied duties, although they may not grow the same things as are grown upon the farms of Western lands.

A country can scarcely become a "power" in the modern world if it does not possess, and dili-

gently work, a rich store of minerals of a varied character, and it is significant that Japan's activity in this respect has greatly increased during the past generation. Japan is one of the petroleum countries of the world, and her copper deposits are of enormous value, while she holds the best part of the Pacific coal supply, yielding much more than New Zealand and Australia together. Sulphur and silver are also produced in very great quantities, but Japan is not one of the leading countries for the production of iron, which takes a high place among her chief imports. But Japan has plenty of varied products, which the great iron countries are only too glad to take from her in exchange for their iron and machinery.

The large mountainous peninsula of Korea became part of the Japanese Empire in 1910, and is now much more productive than it has been in the past. It is a great grain country, growing rice, wheat, and beans, as well as cotton and tobacco, while the Japanese are also planting the mulberry tree very extensively, supplying seedlings from their own plantations. The cattle of this country are very numerous and of good stock, so that Korea supplies one of the most serious deficiencies of Japan. Gold, copper, coal, and iron are known to exist, and will doubtless be largely worked when roads and railways have been constructed. Korea is a very fruitful field for the employment of Japanese energy, which cannot find an outlet within the somewhat narrow borders of the island empire.



## II

Japan was first made known to the nations of Europe in the thirteenth century, mainly by travellers who had come overland from Eastern Asia and who brought strange tales of the Chinese and Japanese, as well as samples of their products, and especially of their artistic work in china and wood. It is believed that the art of woodcutting, which preceded printing from metal types, came from China, and it is also believed that the wood engravings of Italy which beautified some of the earliest printed books owed a great deal to Japanese artists in wood. But in spite of these things, and of the supposed gift of the secret of making gunpowder by China to Europe, there was little intercourse between the East and the West, and it was not until the middle of the sixteenth century that the Portuguese first sailed into a Japanese harbour. After this there was more frequent communication, which was, however, checked about the time of our King Charles I, by an edict forbidding to the Japanese any commerce whatever with foreign lands, except to a very limited extent with China and Holland.

For more than two hundred years this edict was in force, and the Dutch were the chief agents of communication with Japan, greatly to their own commercial advantage. Other traders tried again and again to break down the barrier, but without success, and it was as late as 1854 that an American

captain was able to obtain trading privileges from the rulers of the island empire, whose ports were gradually opened, first to the United States, and later to the traders of Western Europe

This change was not made without a desperate struggle on the part of those who upheld the old order in Japan, and the entry of the foreigners was only one part of a great change which was gradually made among the Japanese people. For some hundreds of years they had lived under a kind of dual government, the Emperor living in a seclusion which was almost sacred, while the ruling power was in the hands of the Shogun or Regent, who was assisted by the Daimios or great territorial princes. These nobles were really little less than petty kings, keeping up almost royal state and maintaining a large body of retainers known as Samurai, who owed obedience only to their lords. In the latter part of the nineteenth century the advanced party succeeded in breaking up this old order of things, and after that time Japan set out on her wonderful advance, which eventually made her one of the Great Powers of the world. Instead of wishing to limit her intercourse with the foreigner, she now desired to extend it in every possible way, and a great commerce quickly grew up with the chief trading nations, and especially with the various portions of the British Empire.

This oversea commerce is very largely concentrated at the two ports of Yokohama and Kobe,

while Osaka and Moji have also a very considerable share of the trade. The two first-named ports share the long-distance trade about equally, while Osaka trades most with China and Korea and Moji with the British-Chinese port of Hong-Kong. The trade with



A STREET SCENE IN KOBE DURING A FESTIVAL.

the Russian people mostly passes through smaller ports, of which Nagasaki is the most prominent. Yokohama is the port of Tokio, the capital of the Empire. Railways have been built in the three main islands, but there are not many good roads, most of the land traffic, apart from that carried by railways, being conducted on the backs of the rather small Japanese horses.

We have already gained some general idea of the nature of the products which Japan can offer to the outside world, but the things sent to distant lands are mostly silk, copper, and camphor, which are taken by France, Italy, Britain, and Germany,



NAGASAKI HARBOUR

our own country taking the largest share of the copper, while France takes by far the largest quantity of the silk in various forms. These goods are also sent to the United States, India, Australia, and China, but the Pacific lands take large quantities of Japanese coal, cotton goods, and yarn, as well as tea, in addition to the three leading commodities named above. Japan also exports a very large

quantity of fancy goods and ornaments, as our shops will testify, and the names and character of these articles can be readily ascertained for yourselves. These goods make up about one-eighth of the total exports, and, though of great delicacy and beauty, can be bought cheaply, because the artistic Japanese workman will do his best at present at least, for what we should consider very low wages indeed.

In return for these things, Japan imports certain articles the nature of which gives a clear indication of the change which is taking place in the life of the nation. Among these, iron and steel goods, including machinery, ships, and rolling stock for railways, figure very largely, and are in ordinary times sent from the United Kingdom, the United States, Germany, and Belgium. In spite of her own supplies of petroleum, it is significant that Japan now requires to import a large quantity of this useful substance, which she gets from the United States and the Dutch East Indies. She also needs to supplement her own supplies of rice, and does so by importing this grain from India and French Indo-China. She is learning the white-bread habit of other great Powers, and therefore imports large quantities of flour from the United States. She must also take in a great deal of sugar, and this is got from the Dutch East Indies. The warm clothing required for her rather cold winters is got from Britain, while raw cotton for her own mills, and cotton goods, which are more worn than anything else, come to her from India, China,

the United States, and Britain, the last-named having almost a monopoly in the trade in cotton cloth and cotton piece-goods. On the whole, Britain has by far the greater part of the carrying trade, but there are now Japanese vessels running on four great ocean routes to Europe, America, Australia, and Bombay.

The Japanese population is about equal to that of the British throughout the Empire, and when the census is taken the people are classified as royalties, nobles, knights, and commons, the last-named being, of course, in a very great majority. There are about 70 royalties, 6000 nobles, and two and a quarter million knights, so that the class differences have not entirely disappeared with the abolition of the picturesque but somewhat quarrelsome Daimios and Samurai. About one-ninth of the total population live in the six largest towns, which are, in order, Tokio, Osaka, Kobe, Kyoto, Nagoya, Yokohama, and Nagasaki. The capital, Tokio, is not only the largest town, but represents Japan in much the same way that Paris represents France. It contains about 2 millions of people, Osaka about  $1\frac{1}{4}$  millions, while the other great centres vary in population from about half a million to 400,000, though Nagasaki has only about three-sevenths of the population of Yokohama. Japan is therefore, like some of the Western Powers, an agricultural country, with a tendency towards the enlargement of its towns.

Tokio stands at the outlet of the rivers which drain the largest of the alluvial plains of Japan,

and is therefore well fitted to be a national centre, both for government and home and foreign trade. It has a splendid imperial palace, built in Japanese style, but furnished like the palaces of Europe, and lit with electricity. The Government buildings are handsome and commodious, being mostly built of brick, and there is a university which has a very large number of students. The port of entry for Tokio is Yokohama, which is about seventeen miles away. Tokio is on the whole a healthy city, and in the springtime is gay with the plum and cherry blossom, one riverside avenue of these trees being five miles in length. The chief mode of conveyance about the streets is the *jimikisha*, a small two-wheeled carriage drawn by a stout porter, but tramcars and buses are also very much used. Foreigners can now live in any part of the city, though it is not long since they were confined to a special quarter. The fact that the houses of the city are mostly very low makes the area of Tokio very large compared with its population, providing a striking contrast in this respect to New York.

Osaka is a manufacturing and trading centre of "imperial" rank, situated on both banks of the Yodo River, which flows through the island of Hondo. Because of its numerous canals and bridges, it has been called "the Venice of the Far East." The streets are straight and narrow, and because of its low-lying situation the city has a somewhat unhealthy climate. Osaka makes cotton goods for

home use, glass, iron, and steel goods, as well as boots and shoes, matches, tobacco, and clocks, while shipbuilding is increasing, and there is a large Mint. The harbour of Osaka is not very suitable for large vessels, and the trade of the city is more Japanese and Chinese than cosmopolitan. The city is famous in Japanese history, and has a very fine palace built within a strong citadel, which was subject to many attacks during the frequent Japanese civil wars.

## THE CHIEF COUNTRIES OF WESTERN EUROPE

### I

WESTERN EUROPE may be said to include the home territories of the three countries, Britain, France, and Germany,<sup>1</sup> with those of three smaller nations, Belgium, Holland, and Denmark. The region occupied by these nations is not very definitely marked off from the rest of Europe, but the fact that it has produced the three strong races who have risen to world power, namely the British, French, and German, prompts the inquiry as to how far geography has been concerned with the internal development of this part of the world.

<sup>1</sup> After the war Germany lost her former position as one of the leading Great Powers. But although deprived of European territory, foreign colonies, and wealth, she retained her independence and most of her natural resources, the most important of which consisted in the indomitable energy and untiring enterprise of her people, which will probably lead to her recovery as a leading nation, her post-war condition being more or less temporary.



In the first place, these three countries lie in the land centre of the globe but have more or less open access to the sea, and consequent ease of communication with other countries. A map of the land hemisphere shows clearly that the English Channel and North Sea form the geographic centre, and these two parts of the ocean are moreover free from ice all the year round. Britain is, of course, most favourably situated with regard to easy access to the sea from all parts of her area but it is worth noting that Northern France is really more central from a world point of view, and history shows us that France was the great naval nation before Britain took that place during the nineteenth century. Each of the three great Western Powers has important fisheries, which form an excellent training-ground for sailors of their fleets.

But it is of little use having open access to the sea if a country has no resources with which to carry on a profitable trade. Ocean commerce can supplement what is lacking in any given country, but the country cannot obtain these necessities without the means of purchasing them. She must have resources of some kind, whether vegetable, mineral, or animal, or a combination of all. Each of these three leading countries has such resources in abundance. Those of Great Britain are chiefly mineral, those of France are agricultural, those of Germany mineral. This is, however, a broad division, and refers to those commodities which the three Great Powers hold

available for exchange Great Britain produces a great deal of wool, meat, and corn, besides her minerals France has rich and busy mining districts, as well as farms, vineyards, olive groves, and mulberry plantations Germany is a rich farming country, as well as a land of minerals and chemicals

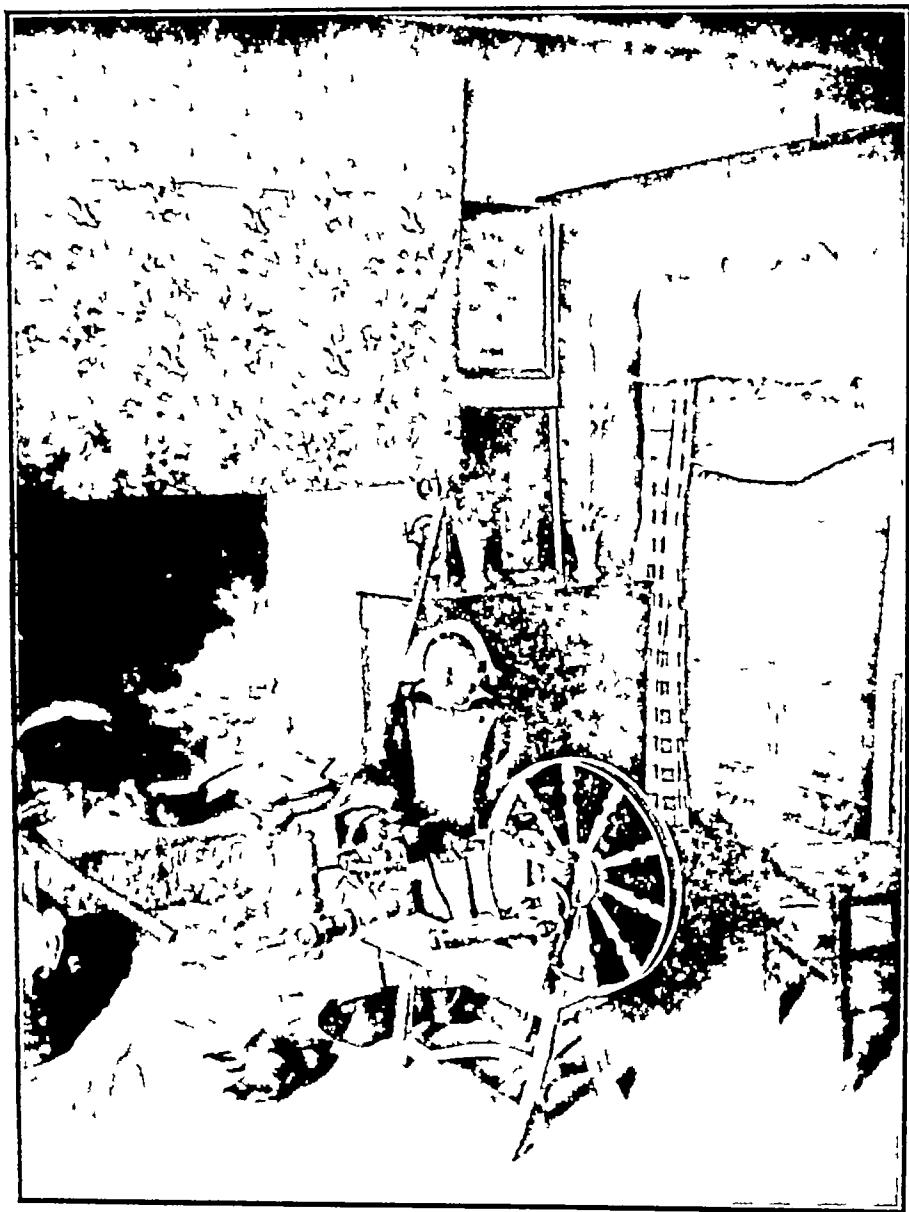
Again, it is of little use having a central position and rich resources if the people of a country are not energetic and enterprising, and, as I have already pointed out more than once in previous chapters, this is largely a matter of the climate of a country The territories of these three countries lie in the North Temperate Zone, but for the most part nearer to the pole than to the equator They have, therefore, on the whole, a temperate climate, with an inclination to that coldness which produces physical fitness and energy necessary for the work of mining, manufacturing, fishing, trading, farming, and all the other strenuous duties which must be performed if a nation is to hold up its head among its fellows and attain to modern "greatness"

We have already in Part I of this book given special attention to certain aspects of modern life in our own country, and to its general connection with the world at large Let us now consider the modern activities of France and Germany in turn, chiefly with a view to finding out the nature of their national work and aims both at home and abroad We shall begin with France, which is our nearest

neighbour, and with whom we fought side by side in the Great War against Germany

It is very difficult to say in a few words what France is as a nation, and what she means to the world as a Great Power. Here we have a country with an area four times that of England, but with a population before the war about the same as that of the United Kingdom without Greater London. When the census was taken in France after the war it was found that the population had decreased, but only very slightly, while you will remember that the number of people in the British Isles had increased. The people are hard-working, thrifty, lovers of liberty, dreamy but excitable, clever, original, and inventive, worshippers of beauty and possessors of that strange, elusive quality which we call taste. They are a military nation, but not a warlike one and when they went forth to "conquer the world" under Napoleon the Great in the beginning of the nineteenth century it was largely because their emotional natures were for the time under the spell of a commanding personality. You will find out how the people of France regarded the Emperor if you read a splendid story entitled *The Conscript—A Tale of Waterloo*, by MM. Erckmann-Chatrian, two French authors who wrote in collaboration, and learn, in the reading of it, a great deal of useful geography as well as history.

The land frontiers and the coast-line of France are about equal in length, and the whole country



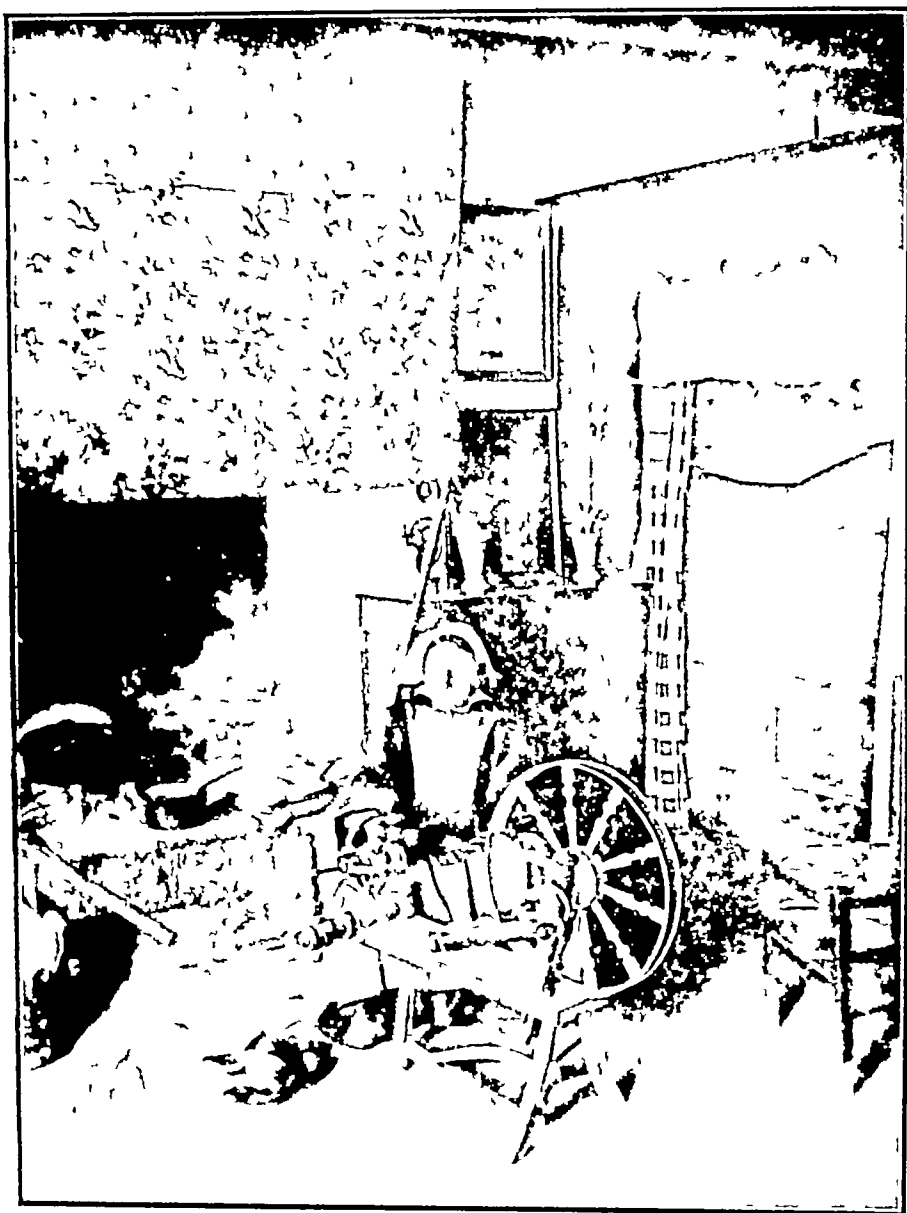
*(P. 100, 101, 102)*

INTERIOR OF A BRLTON VILLAGE HOME

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*Mr. C. H. C. C. C.*

INTERIOR OF A BALTON VILLAGE HOME

## 188 THE PROGRESS TO GEOGRAPHY VI

is very compact, the geographical centre lying about half way between Orleans and Lyons, though the national centre is most emphatically at Paris. A straight line through the geometric centre of France and through London passes also through Edinburgh,<sup>1</sup> and cuts off to the eastward the more populous half of France, in which the three largest cities, namely, Paris, Marseilles, and Lyons, are situated. The land frontier of France before the war was set with "strong places," those on the German frontier being Verdun, Toul, Epinal, and Belfort, forming an advanced line, with Maubeuge, La Fère, Reims, Langres, Dijon, and Besançon in a second line. Paris was considered as the centre of defence, being surrounded by a wall and a ring of advance forts or batteries, the whole forming two entrenched camps at St Denis and Versailles. One result of the war was the transference to France from Germany of the two provinces of Alsace and Lorraine, the former containing the strong fortress of Strasbourg, the latter that of Metz. The Belgian frontier was supposed to be defended by international honour before the war which broke out in 1914, and which was, for the most part, fought out in this region. On the coast, Toulon, Rochefort, Lorient, Brest, and Cherbourg are naval harbours defended by strong forts.

But within this ring of steel and "water-walled

<sup>1</sup> It is interesting to note however on a map of Europe how far Edinburgh lies to the west of Paris.

bulwark " what is France doing in the happy days of peace? As I have said, she is mainly an agricultural country, a land of corn and wine and oil, capable of producing, on the whole, a sufficiency of food for her own use. She produces nearly three times as much wheat as Germany, and much more than half the total quantity grown in what we have agreed to call Western Europe. Her bread is now mostly white, and made in long crisp rolls sometimes nearly a metre in length. She comes next to Germany in the cultivation of the sugar-beet, and of potatoes, from which a spirit is now extracted for use in motor traction. She took second place before the war in cattle and sheep, Germany being the leader in the former, and the United Kingdom in the latter, but the whole of Western Europe yields to Germany in the rearing of pigs. France's comparative deficiency in sheep means that she must import wool to a larger extent than Germany, but the United Kingdom imports about half as much again. There are about a million and a half people in France engaged in the cultivation of the wine-grape, and other valuable crops are those of chestnuts, walnuts, olives, cider-apples, and plums.

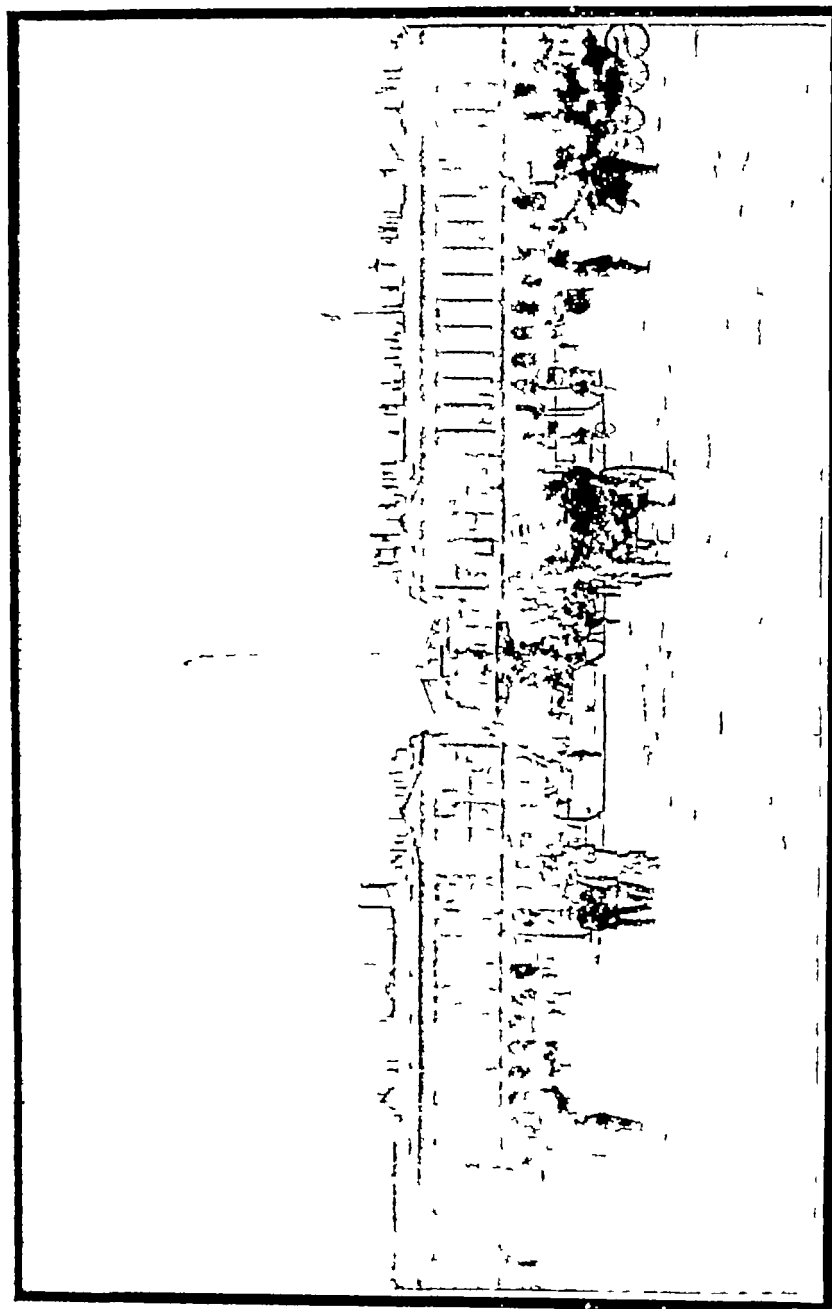
France is deficient in coal, the comparative production numbers in Western Europe being Britain 8, Germany and France 1 each, but we must not forget that, being mainly agricultural and having on the whole a warmer climate, France needs less coal than either Britain or Germany. She has a



productive iron-field in the north, near Valenciennes, and both coal and iron in the two provinces taken back from Germany, but in the matter of ore and pig-iron production yields place to Britain. All this goes to prove that France has her own character, so far as the nature of her natural productions is concerned. Each country cannot be first in everything, and, after all, the nation which can do without all the others is in a state of stagnation.

The intercourse of France with the rest of the world shows, however, that there is no lack of enterprise among her people. In normal times her trade is about half the volume of that of the United Kingdom. Like the rest of Western Europe, she must import cotton, and she now takes a great deal of raw silk from Japan and China. She imports also a large amount of coffee, but a comparatively small amount of tea, as well as large quantities of rubber, petroleum, copper, coal, timber, flax, hides, furs, and wool. She pays for these goods chiefly by means of her manufactured fabrics and fancy goods, wine, fruit, olives, beet-sugar, and machinery of the rather slighter and more delicate kind. Marseilles, Havre, Cherbourg, Bordeaux, Boulogne, Dunkirk, Rouen, and Calais are the chief outlets of her oversea trade.

Paris is the leader in point of population among the large cities of Western Europe, Berlin coming next, the two together containing roughly two-thirds of the population of London, including the "outer ring."



PLACE DE LA CONCORDE PARIS

[P. 103, *Internationales Entom.* 1

## II

Germany is physically a land of great variety, and its only real unity lay, before the war, (1) in its Government, which was centred at Berlin, and (2) in the antagonism of both north and south Germans to the Slavs of Eastern Europe. When the great contest was over, Germany lost territory to Poland, France, and was deprived of her oversea colonies, but on the whole her natural resources were not greatly lessened, and her almost bankrupt position in Europe a short time after the conclusion of peace was a natural result of unsuccessful war, but not a permanent condition. Moreover, she still had a population of nearly sixty millions of energetic, hard-working people.

Her greatest cereal crops are of oats and rye, which is a sign of a cold, damp climate, and on the other hand, she produces a great deal of wine and tobacco, both of which, as you know, require a warm climate for their cultivation. The Baltic ports are ice-bound for a considerable time during the winter months, but the valley of the Rhine is a sunny land like parts of South-eastern France.

The sea and the mountains cut off Germany to north and south respectively. On the east the boundary line will always lie where the sword shall settle and race antagonism will agree to remain in peace—for a time. Here the problem is complicated by the intermingling of races on the borders of the

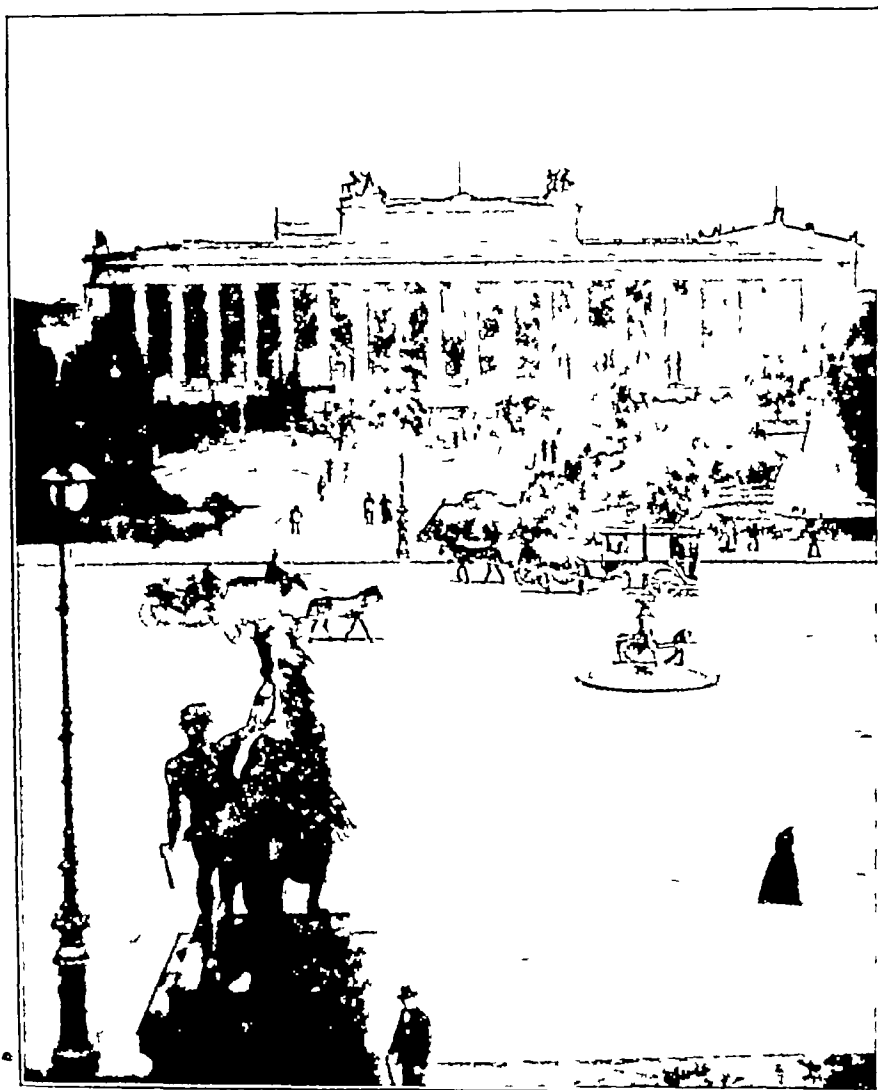
separate countries After the war Germany was forced to yield territory which should give to the new Poland a "corridor" to the Baltic Sea, and this cut off from the main German state the easternmost section of Prussia, in which Königsberg is the most prominent town, while it gave to Poland a region in which there were comparatively few Poles This effort at carrying out the idea of "self-determination" did not appear to be very successful

We have already noted some interesting comparative facts in connection with Germany's agricultural activities, which were very great and extensive before the war, and which will probably revert to their former condition as the effects of the great upheaval wear away We must make a further careful note of the fact that while France imported only a small quantity of grain, which she could do without if necessary, Germany was obliged to import a very large quantity of wheat, about one-third of that taken in from abroad by the United Kingdom, as well as a great deal of barley, nearly twice as much as Britain, and an enormous quantity of oats We may therefore say with truth that Germany is not, like France, "mainly agricultural," nor yet, like ourselves, "mainly industrial," but about half-and-half, with an increasing tendency towards the industrial

In coal production pre-war Germany ran the United Kingdom very close, and between them they produced nearly one-half of the world's supply of this mineral If the coal production of Belgium had

been added to that of Germany the yearly output would have been about equal to that of Great Britain! By the restoration of Alsace-Lorraine to France, Germany lost a valuable coalfield, and she was also obliged to give up to her former enemies a great deal of the coal raised from the mines left to her. As a compensation for the destruction of the coal mines in the north of France, Germany gave up to France the exclusive rights in the exploitation of the coal mines situated in the Saar Basin. For fifteen years this industrial district was to be governed by a Commission of Five chosen by the League of Nations, and then to decide by vote whether this form of government was to continue or the district was to be joined on to France or revert to Germany.

Let us now compare the pre-war iron and steel trade of Germany and Britain. Germany led the way in the production of iron-ore, pig-iron, and steel, the ore coming mostly from the field round about Dortmund, which is continued into Belgium and into the north of France in the neighbourhood of Valenciennes. Here is a field of industry in which the best brains will win and the keen competition of Germany before the war had the direct effect of causing decided improvements in British methods of smelting iron-ore and manufacturing steel—good as those methods were before that period. One interesting change was in the use of coke-oven gas in the steel-works, resulting in a distinct saving of fuel, while electricity also came into more general use



OLD ART MUSEUM, BERLIN

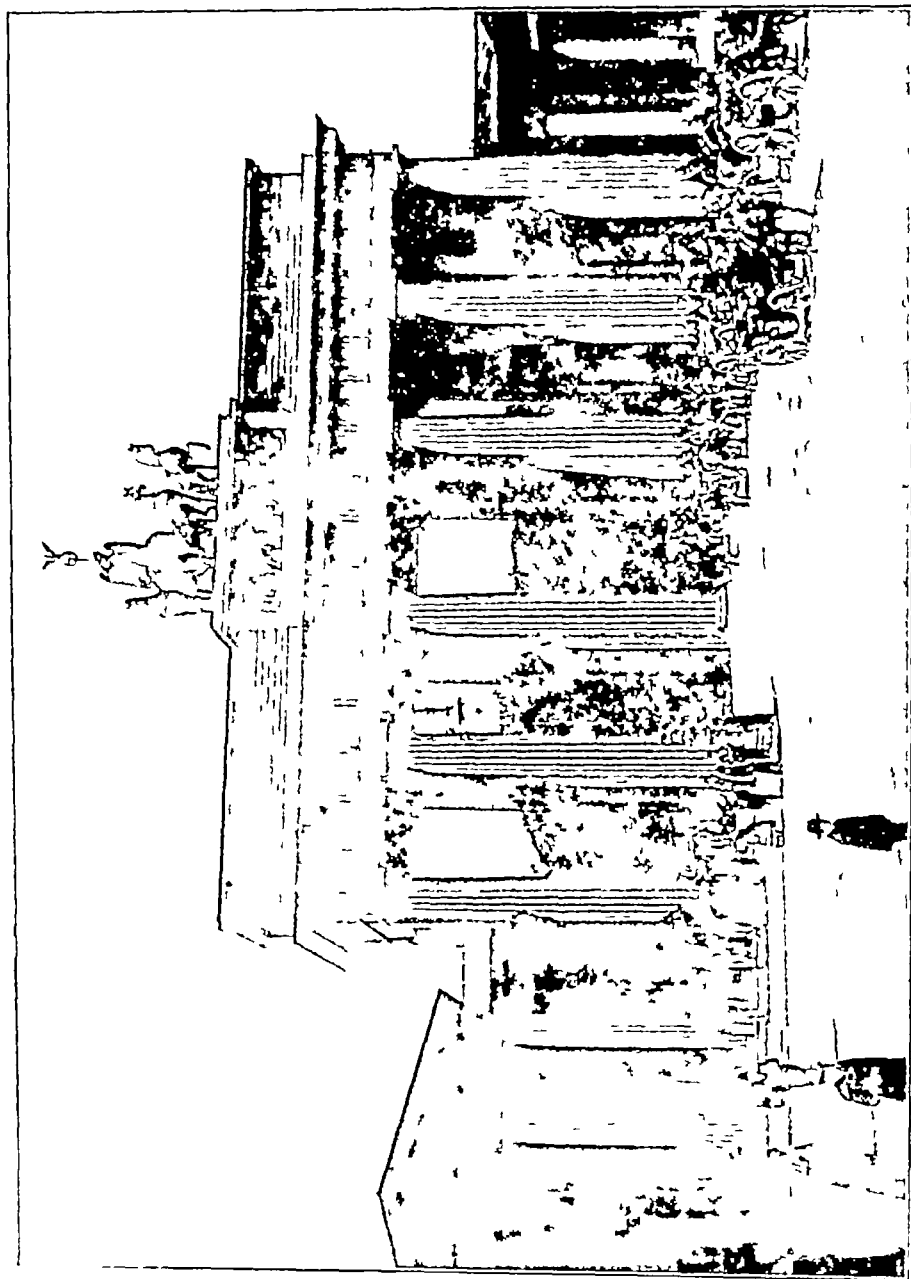
*[P] to [U] m. 1*

in non- and steel-works. The quality of British steel was the highest in the world, and it was usual

for Germany to send a great deal of her steel to Sheffield to undergo the British tests. In this matter we see the supreme importance to the national life of the greatest possible efficiency in the workshops and of encouraging clever inventors in every possible way, for when the war broke out the efficiency of Britain's navy, and therefore the very life of the country, depended largely upon the quality of her steel.

Britain must send abroad for her copper, and she imports a great deal from Spain, as well as from other parts of the British Empire. But Germany has large copper supplies of her own, as well as plenty of both lead and zinc, which Britain also lacks. On the whole, it is no matter for surprise that Germany had become a great industrial nation, in which many people had begun to regret the way in which the great towns were drawing workers from the land.

The minerals of the country are still largely used in the workshops and factories in which machinery and textiles take the leading place, the latter including cottons, linens, woollens, and silk. This is, on the whole, similar work to our own, but the British makers were first in the markets for the sale of these goods, and the quality which they supply is unsurpassed. Only the maintenance of this quality, combined with a readiness to give a foreign customer exactly what he wants, will retain this great textile trade in British hands. Among the manufactures in which the Germans have made



*Picture from Company*

THE BRANDENBURG GATE, BERLIN



special headway are those of chemicals of various kinds, especially sulphuric acid and chemical dyes, sugar and molasses extracted from the sugar-beet, potato-spirit, glass, clocks, and wooden ware in great variety, scientific instruments, beer, and leather. A great deal of paper is made, largely from wood pulp, and it must be remembered that Germany has extensive forests, which we have not. This country has always been noted for its publishing activity, and the invention of printing in the fifteenth century is claimed by the western city of Mainz, though this is in dispute.

In the shipping world Germany made enormous strides during the years immediately preceding the outbreak of the war in 1914. By far the largest numbers of her ships used the North Sea ports of Hamburg and Bremen, or their outports, and the following passage, written by a neutral correspondent to the *Times* during the war, will help to convey an idea in a negative way of the enormous amount of business transacted by the famous port of Hamburg before the exercise of British naval power at the beginning of the war —

“More than 18,000 ships used to enter the port of Hamburg every year. Goods worth over £700,000,000 sterling were annually imported and exported. Now the incoming ships can be counted on the fingers of one hand, and seaborne trade has almost ceased. Hamburg was the great port of transit for the continent of Europe, and, to a con-

siderable extent, for the Scandinavian countries. All that is past—Hamburg was the great warehouse for oversea commodities. Now the warehouses are all but empty. Hamburg was the centre of the coffee trade, and held the largest stores of coffee. Now those stores are depleted, and, as the supply cannot be replenished, it is becoming scarce throughout the country.

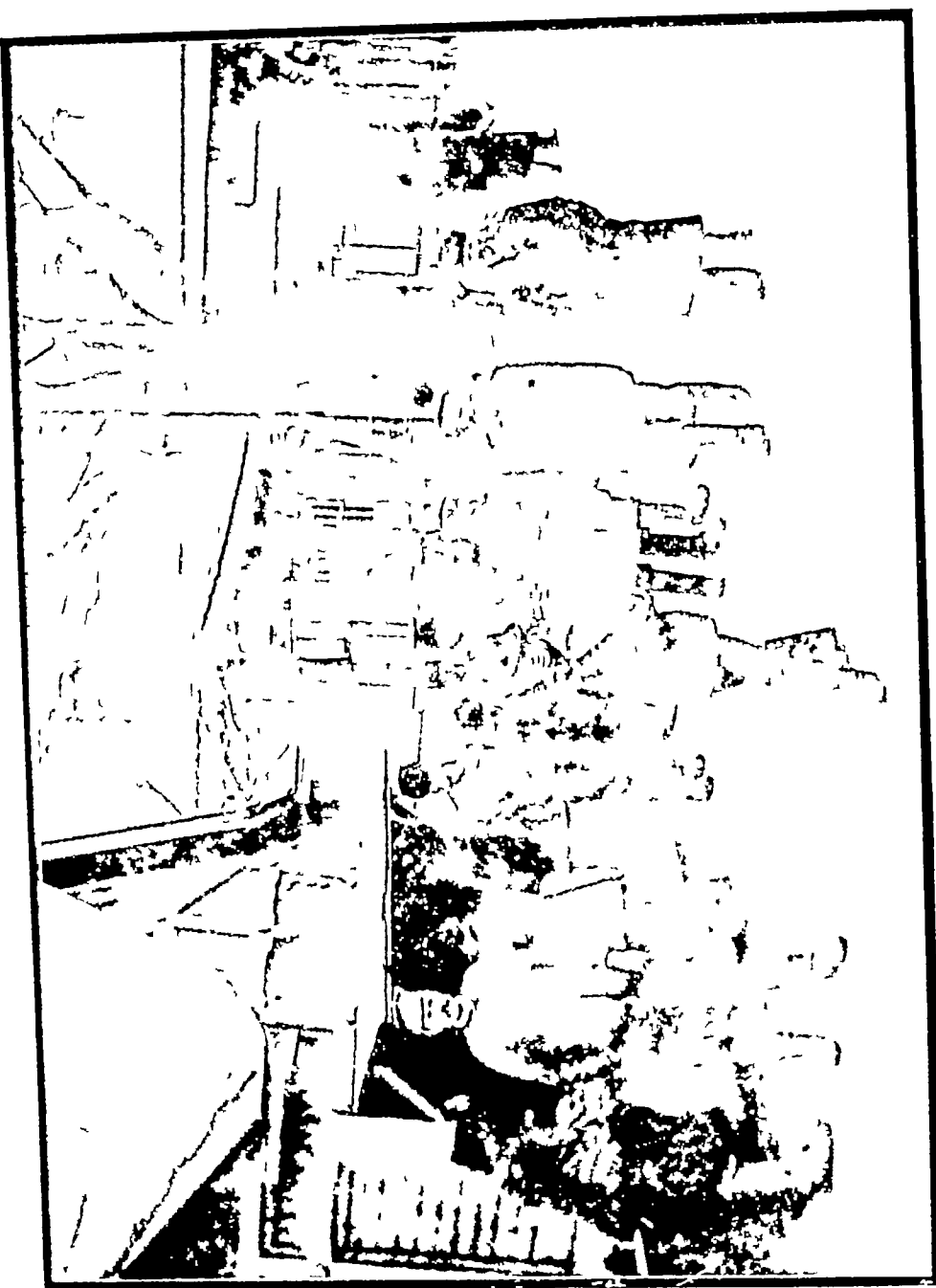
“A few small vessels engaged in coastwise trade still come and go, a few ply also between Hamburg and Scandinavian ports—at least, I was told that the only traffic still visible was of that kind. I carefully hid my interest in the traffic down to Cuxhaven, and on the waters of the Elbe estuary and of the Kiel Canal. But my impression is that most of it was connected with the fleet and with the shipyards. The naval yards work day and night at the highest pressure and with an increased number of hands. But everything else is dead. The Hamburg-Amerika Company, the largest shipping concern in the world, with its 215 vessels aggregating more than 1,100,000 tons register, has now but a few small craft employed in coastwise and Baltic trade. Its mighty director, Herr Ballin, has become the director-general of the organisation for supplying the army and navy.” It is significant of Germany's powers of recuperation that her trade with the United Kingdom steadily increased during the three years following the signing of the armistice. Her general oversea trade also increased during the same period,

but its total volume was only about one-fourth of what it had been before the outbreak of the war

## MODERN RUSSIA

WHEN we look at a pre-war map of the great Russian Empire extending across two continents, and almost from ocean to ocean, we say to ourselves, "Surely here is an Empire in which there is room enough for all the activities of a great nation " Yet the history of Europe during the past two centuries contains an almost continuous record of attempts on the part of the Russians to extend their borders until they came within the " charmed circle " of the West , which Peter the Great found so fascinating that he even ordered his nobles to cut off their beards in order to make them more like the men at the royal courts of the West he had visited For an explanation of these Russian attempts we must look to the physical character of the country once ruled by the Tsars , for history is always dependent upon geography

The area of the Tsar's dominions was about one-seventh of that of the land surface of the globe, and about seventy times that of the United Kingdom The Russian population was roughly four times that of Britain (about 2 7 of Germany), and was increasing steadily every year The population was most dense in the territory enclosed by a four-sided figure which can be formed on the map by joining up the



cities of Petrograd, Lodz in Poland, Odessa on the Black Sea, and Nijni-Novgorod at the junction of the Oka and the Volga, and the number of people was steadily increasing in the fertile lands of Southern Siberia, along the path of the Trans-Siberian Railway. The real Russia was therefore the western portion of the Tsar's dominion, and this is the country which comes most directly into the calculations of the other Powers of Europe. Here is a densely-peopled, fertile land, rich in minerals and forests, but requiring an outlet upon a sea which is not ice-bound for the best part of the year, for in north, south, east, and west Russia is hemmed in by the ice, which closes even the Black Sea ports for a considerable portion of each winter, here we have the real reason for Russia's continual westward pressure, and for German-Austrian fear of the "Slav menace."

The war, however, forced Russia back upon herself. Russia in Europe became a Republic after the Revolution of 1917, with its capital at Moscow, and she was surrounded by a ring of independent or allied republics carved out from the territory previously ruled by the Tsar. The Grand Duchy of Finland broke away. Three separate republics were set up in the maritime region lying to the south of the Gulf of Finland, namely, Esthonia, Latvia, and Lithuania. Poland became an independent republican state, and several similar states were set up in the Caucasus region, while Siberia became the Far-Eastern Republic. The territory that looked to

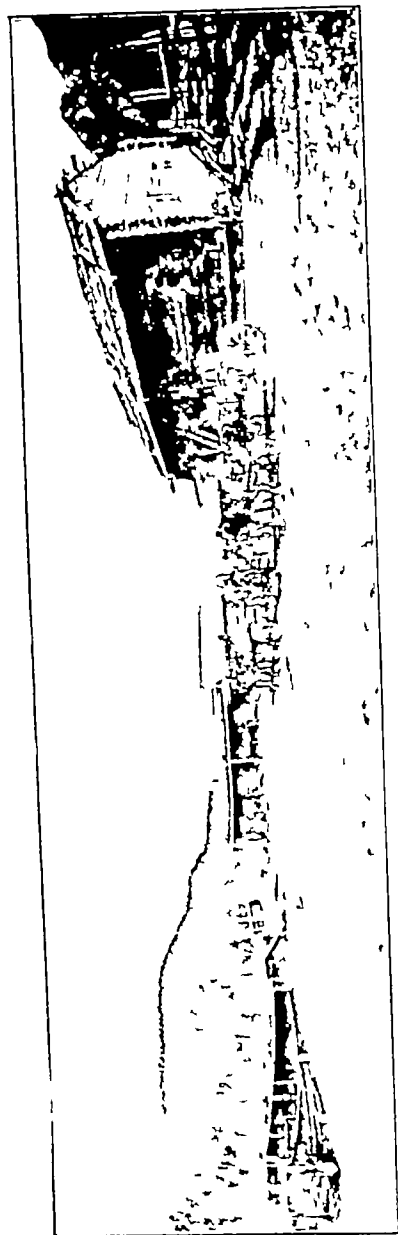
Moscow as its centre of government was much smaller than that which had been ruled from Petrograd, but it was much more of a unity, though it still included among its people large numbers of Germans, Poles, and especially Jews

Seeing that pre-war Russia desired so earnestly to reach the open sea, it is reasonable to ask what she had for disposal in the markets of the outside world, and how far these commodities supplemented the resources of other countries which were taking a foremost place in modern activities. In the first place, she had enormous quantities of grain to sell, which were very largely drawn upon before the war by ourselves and Germany, although the quality of the Russian wheat was not so high as that drawn from the United States, Canada, and the Argentine Republic

This lower quality was mainly owing to poor methods of cultivation on the part of the Russian peasant or *muzik* farmer, who did not make the most of the land under his control because he had not been taught how to do so. Steps were being taken, however, to remedy this state of affairs. Farming experts, trained in agricultural colleges, had been stationed at various centres throughout the country to advise and instruct the small farmers. These men not only gave lectures, often illustrated with limelight views, but visited the farms to give individual help, and in some places there were test farms, where the newer methods could be seen in operation, and on which up-to-date machines and

manures were in use. The object of the instruction was not so much to encourage the laying out of more land, as to ensure a greater yield per acre, for the return per acre had been very low when compared with that of other countries in Western Europe. The land required a great deal of chemical manure, and this was imported in large quantities. More storage places were required, and Government grain-elevators had been set up in various places. It was recognised that better means of transport must be found if Russian grain-growing was to take its proper place among the world's agricultural industries, for roads were bad, railways comparatively few, and the supply of conveyances defective. Hull took most of the Russian wheat sent to Britain, and London most of the oats. After the Revolution of 1917 agriculture and industry fell into a state of chaos owing to the insecurity of government and the fact that Russia was cut off from the rest of the world and could get no capital to develop her resources. A comparative table of production in 1913 and 1920 shows that only a quarter of the coal, half the oil, one-sixtieth of the ores, a quarter of the salt, one-sixth of the sulphates, one-fourteenth of the sugar, and one-third of the tobacco of pre-war days was produced in Soviet Russia.

One of the interesting and most important results of the opening of the Trans-Siberian Railway had been the establishment of a large number of dairy-



SIBERIAN POST HOUSE ON THE FLAT



VIEW IN SIBERIA SHOWING PARK LAND BETWEEN THE FOREST AND THE STEPPE

PLATE 11



farms in the fertile lands of Western Siberia. The Government had provided refrigerating cars on this line, and there had grown up a large export trade in butter and eggs. Russia had also become a regular source of supply for bacon to the British market, though the price, like the quality, was below that of Danish or Irish bacon. Pigs were put on the stubble after the harvest, and fattened in pens during the winter, and when ready for market were sent by the farmers to the bacon factories which had been established at various points. The best hogs were fed on rye or wheat-meal, with a mixture of boiled potatoes, but many were fed on the refuse from the factories producing alcoholic spirit from potatoes, and these were of very poor quality. The bacon factories were carefully supervised by Government inspectors, and on the whole this industry was very promising. But it was drastically reduced after the Revolution.

Russia had, near Baku, now in the Republic of Azerbaijan, one of the largest petroleum industries of the world, and the export of this useful oil was very large, while the immense oil resources of the country had only been partially worked. Prospectors were always busy near Baku, in the Caucasus province, in Transcaspia, and elsewhere, spying out possible places for the sinking of wells, and when oil was found, refineries were set up which turned out illuminating oils, lubricants, crude oil, naphtha, and other products of great use in various industries. A large amount of British capital had been invested

in this Russian industry, and British companies were busily at work in the districts named, for, as you know, petroleum and its various products are highly important in modern life. Liquid fuel was largely used in Russia, and is coming into more general use

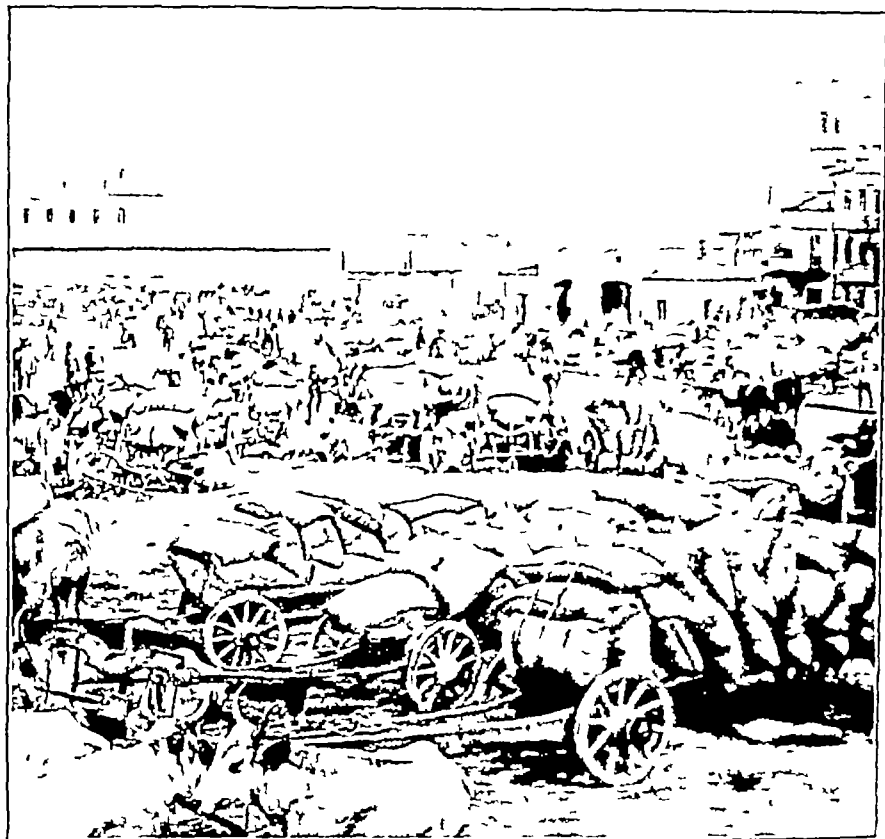


PEASANTS OF THE CAUCASUS

(P. 1000 M. 13)

in our own country, on railways, in factories, and in the Navy, and if we have not the raw material for this work, we have the engineering skill and energy to make use of it when it is brought to us from other lands. The supply of petroleum may one day become as important as the supply of coal is at the present day.

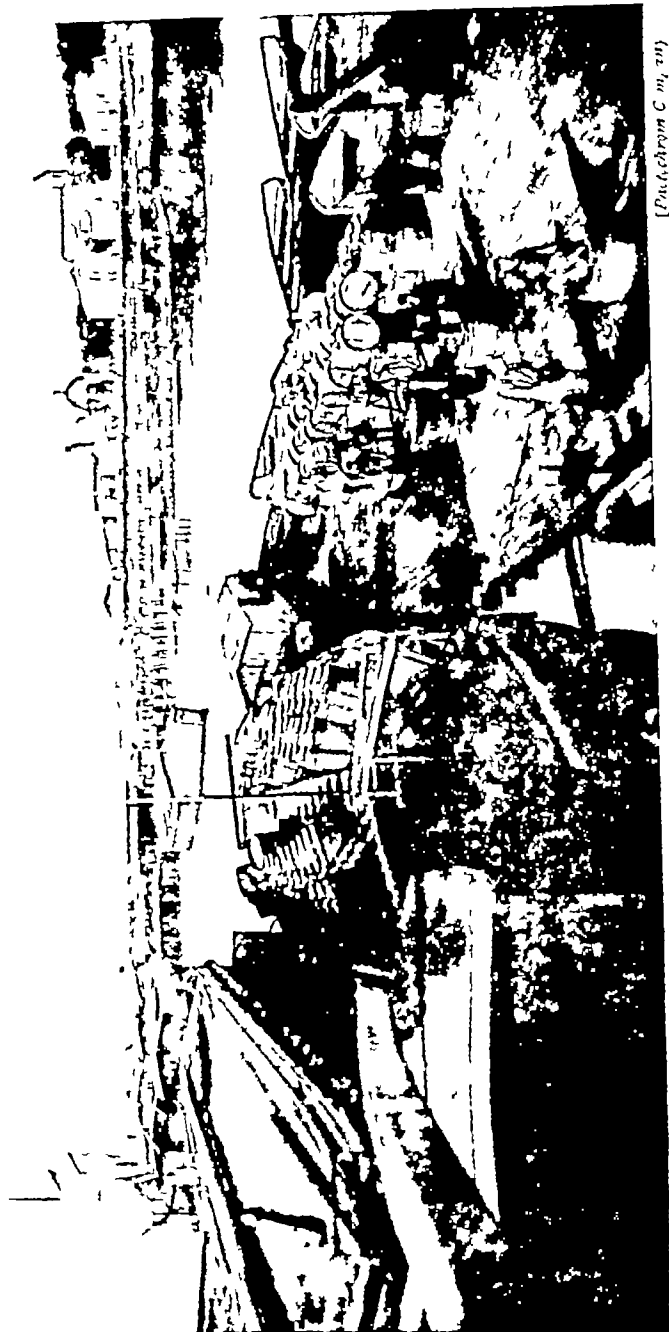
Russia has in her extensive forests a very valuable national asset, and can supply from them many products which are lacking in other countries, including



GRAIN AT ODESSA

(Photo by L. J. ...)

our own The pre-war trade in timber was very large, and passed mostly through the Baltic ports to the east-coast ports of Britain, such as Leith, Newcastle, and Hull Prices, however, varied very greatly, and were largely dependent upon the Russian weather.



[Photograph C m, 207]

THE PORT OF ARCHANGEL,

A very heavy winter would stop the felling of trees, and when a sudden thaw came in the spring the roads would become useless for transport. The exports of wood were mostly in the form of deals, boards, and props, and there were many up-to-date sawmills in the Petrograd district where nothing was wasted. The softer kinds of pine were used for making wood-pulp, which was employed in the manufacture of paper. Firewood was also cut up from those portions of the trees which were useless for more worthy purposes, and the forests also provided turpentine, potash, resin, and charcoal for export. The United Kingdom took most of the Russian timber which was sent out of the country, and treeless Holland came next in the list of good customers. This industry was checked and crippled by the war and its results, but the land still retained its natural wealth.

Now that you know the nature of the chief goods which Russia had to offer to the outside world, you will be interested to learn what she lacked most and used to import in exchange for her wheat, oats, timber, butter, eggs, bacon, and mineral oils. A glance at the list of her pre-war imports shows us that she took in an enormous quantity of raw cotton, which gives us an indication of the kind of material worn by the *moujiks*, and shows that Russia was to some extent a manufacturing country. The next leading group of imports was machinery and metal goods, which indicated progress in the modern sense of the word,

and we should no doubt have found that among these goods there were many of the most up-to-date machines for sawmills, factories, and refineries, rolling-stock for railways, and iron bridges for improving transport. I need not tell you where most of these things came from. Coal also figured largely among the imports, for, though Russia has rich beds of this mineral in the basin of the Don and elsewhere, she had not enough for her increasing industrial needs.

## MODERN ITALY

WHEN writers begin to describe Italy, they usually direct the attention of their readers to her past, and to the suitability of the country as a playground for foreigners. They point first of all to such monuments of the past as the Coliseum at Rome, to the remnants of the ancient cities of Pompeii and Herculaneum, which were the victims of the awful might of Vesuvius nearly 2000 years ago, and to the "old-time" greatness of Venice, Florence, and Naples. They speak of the sunny skies of Italy as if they had been specially created for holiday-makers, and hint darkly at the malaria which infests the Campagna round about Rome and other low-lying districts, and at the awful earthquakes which have from time to time brought death and destruction to various parts of the country. On the whole, they convey the impression that the southern peninsula is what the

Americans call a "back number," a kind of mediaeval museum full of wandering, rather tired, tourists, with guide-books in their hands, trying to understand Italy in a fortnight.

Now, the modern Italians are ready enough to welcome visitors from other lands and to show them the antiquities and art treasures—pictures, statues, frescoes, churches—of their country. But they have a very decided objection to Italy being considered merely as a museum. They think of their country as having not only a past, glorious in many ways, but as having also a very creditable present and a most hopeful future. They are now, as they hope, freed, by their own exertions, from the oppression of foreign rulers, and they wish to make the new Italy not only a fair playground for foreigners but a fair home for its own people. There is a new energetic spirit among them which is stoutly determined to win a high place among the nations of the world, not by aggression and the sword, but by means of their native gifts and the natural resources of their beautiful land. If there are many beggars among them, these people are the bad legacy of old-time quarrels of kings and princes, and are not in the least degree "picturesque," as the stupid guide-books so often call them. The modern Italian would gladly take them from the streets and try to teach them self-respect.

Now, the "new men" of Italy have good reason for their annoyance, and for hope and confidence in





the future of their country , for Italy is no barren, neglected, used-up land, but a very " garden of the Lord," capable of supporting a numerous, thriving, contented population, who not only can provide for their own immediate wants, but have also a great deal to contribute to the world's general wealth and happiness. She has many things to spare which the world wants and is willing to pay for, and her people have also certain qualities of character and ability which are different from those of other nations and will prove valuable contributions to the general stock of strength and resource which is going to make the world a better place to live in.

Italians can work hard in spite of their warm climate , they are patriotic in a high degree , they can organise well, without noise and bluster , and they are particularly clever at engineering. If they cannot stop earthquakes, they can make good use of the rich soil which has been weathered down from volcanic lava, and they can fight the malaria by means of the newest engineering and medical science, which may, in time, banish the scourge from many of the worst districts. The spirit of the " New Italy," as expressed by her leading statesmen, writers, and business men, is quite capable of extracting good from things which are usually considered as drawbacks.

Now, Italy is a young country, in spite of her great age, her ruins, and her antiquities, for the present kingdom dates only from 1870, which counts merely

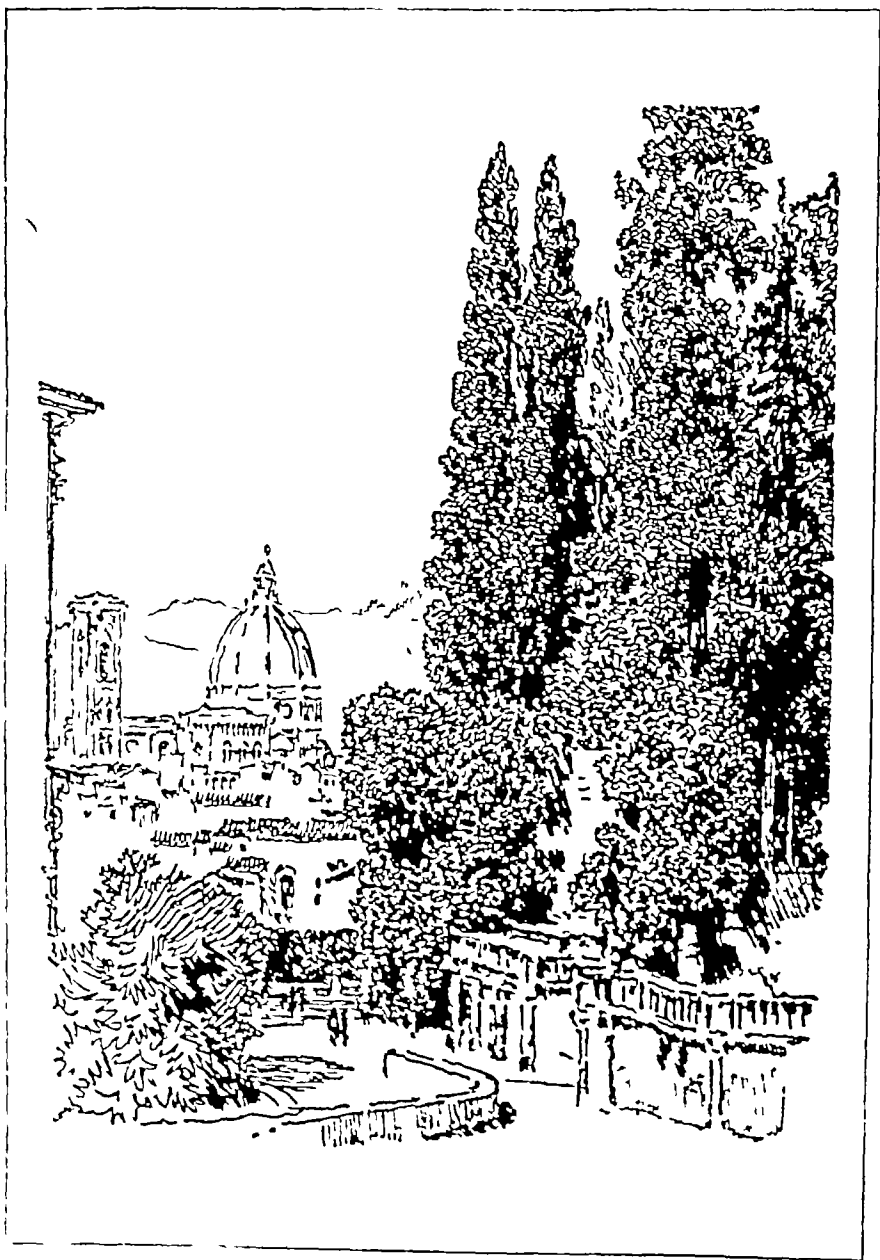
as yesterday in the reckoning of history, but, already, the country is one of the "Great Powers" of the world, and she could not have won to this high position without having great natural advantages, for wealth and power depend largely, as we have seen again and again upon physical geography. Let us consider for a few moments some of the chief resources of the country, and the use which her people have made of them.

We find that, with an area rather more than that of the United Kingdom, Italy has a population of about 40 millions. This is the "man wealth" of the country, and by far the most important asset of all. It is worth noting, by the way, that after Italy was united under one Government the number of her people steadily increased, while as a result of the war she not only gained new territory at the expense of Austria, but added a million and a half to her population.

In the Government returns showing the occupations of the people I find that by far the largest number are engaged in agriculture, forestry, and cattle-rearing, and that the women of the country take a very large share in the work, which gives employment to half the workers in the land. We should therefore expect to find Italy providing the best part of her own food-supply, and raising from the soil certain commodities by means of which she can trade with foreign countries for those necessities of life which she lacks.

One of the most important of Italian exports is raw silk, so that the cultivation of the mulberry tree, on the leaves of which the silkworm is usually fed, is one of the leading occupations of those who live by the soil. Italy stands first in Europe and third in the world for the quantity of silk produced, while the quality is unsurpassed anywhere. The mulberry tree is at its best in a damp, hot region, and the necessary conditions of climate are found in the northern part of Italy, where the population is most dense and labour is consequently cheap, the delicate work of dealing with the silkworms and preparing their food from the mulberry leaves being largely and most efficiently performed by Italian women. The more southerly parts of the country are on the whole too dry for the work to be done with advantage, though silk is produced here also.

Other characteristic products of the Italian soil are the vine and fruits of various kinds, including the orange, lemon, and citron, olives and olive oil. Italian wines are largely exported, but a great quantity is consumed by the people, though it must be remembered that these are very light wines. Cotton can be grown in the south of Italy, and the production was very large when the Civil War was going on in America. This gave a start to Italy's manufacture of cotton cloth, and the fact that the mills export cotton goods from the country is proof of their importance in the industrial life of the kingdom, for cotton cloth must, of course, be



IN A FLORENTINE GARDEN

supplied in the first place for the Italians themselves, and that in large quantities owing to the warm climate of the country. Fine tobacco can be raised in the southern parts of the kingdom, and chestnuts are grown in enormous quantities, many being exported and others used as food in many varied forms by the Italian peasants. Italy's most valuable import is wheat, for she cannot supply herself with what she requires of this necessary grain, but, as we have now seen, she is able to buy it with other products of the soil in which other countries are lacking.

Her next leading import is coal, for Italy is lacking in this useful mineral, though we must not forget that she needs less for domestic purposes than we do, owing to her warmer climate, that she has rich stores of other useful minerals, and that she has abundant water-power in her numerous short, swift rivers, which she is using more and more for the production of electricity. A great deal of iron is mined, as well as copper, lead, and zinc, while an enormous quantity of sulphur is got from the volcanic districts, and this is largely used for trading purposes, for there are few countries in the world which have a supply of natural sulphur. Another rock product which Italy can supply to foreign lands is fine marble of several kinds, including the famous Carrara marble.

Italians excel as engineers, and, like the French, have taken greatly to the manufacturing of motors and aeroplanes, that is, to the lighter forms of



*Unità Unificata Unificata*

ON THE ROAD IN CORSICA

engineering industry in which cleverness, skill, and inventiveness are more necessary than strength and muscle—another matter connected with climate and therefore with physical geography. Skilled artisans, however, receive very poor wages in Italy, and in order to improve their position many of them emigrate to other countries. Large numbers come to England, and especially to London, where some are employed in making asphalt paving. Others have gone to the United States, and large numbers to the various republics of South America. Most of these retain their own nationality, and are of course liable to be recalled for military service in case of war, for in Italy service in the army or navy is compulsory and general.

A large part of Italy's foreign trade is carried on with the United Kingdom or in British ships, most of it passing through Genoa, Naples, and Palermo. Britain is the chief trader of the Mediterranean partly because this sea forms part of the route to India and the Far East. Her liners call at Naples and Brindisi, while some passengers from Britain bound for India and the Far East travel through the whole length of the Italian peninsula in order to make the sea journey as short as possible, and especially to avoid the usually rough passage across the Bay of Biscay. Much Italian trade is also carried on with France. The chief ports are Genoa, Naples, Leghorn, Palermo, and Venice.

I have reviewed only a few of the outstanding

facts in connection with Italy, but I hope I have told you enough to show that Italy is much more than a holiday country, though it is very charming in that character also

## CENTRAL AND SOUTH-EASTERN EUROPE

THERE is something which is more or less definite about Russia, France, Italy, and the United Kingdom when we consider the map of Europe. Each of these countries, in spite of certain artificial boundaries, is more or less well marked off, and arranged about the government centre or capital. Germany also is well defined and unified, with Berlin as its centre. The least definite of the pre-war Great Powers was Austria-Hungary. In the first place, it was a compound, or, more properly, a partnership, of Austria and Hungary, between whom there was no race connection, but rather some amount of antagonism. Its land boundaries were nearly all artificial, and where there was a well-marked boundary, such as the Carpathian Mountains, Austria overlapped it with her province of Galicia. Austria-Hungary appeared to be a collection rather than a unity, and may be said to have had several capitals -- Vienna, Buda-Pest, Prague, and Cracow, though it is to be noted that each of these was a race centre, for Austrians, Hungarians, Bohemians, and Poles respectively.

And when the war was ended the "ramshackle



Empire" fell apart. The Austrians were confined to a comparatively small area composed of a portion of the Danubian plain and the mountainous land of the Tyrol. Bohemia joined with the northern portion of the old kingdom of Hungary to form the new state of Czecho-Slovakia. Hungary was deprived of a large part of her territory by Rumania and Czecho-Slovakia. And another new state was set up known as Jugo-Slavia, which included not only Serbia but also the old Austrian provinces of Herzegovina. The province of Galicia was included in the new Polish Republic. Let us consider in turn each of these new or reconstituted states which have taken the place of the European Power formerly known as Austria-Hungary.

### POLAND

The Polish Republic set up after the war included the Grand Duchy of Poland, which had formed part of the Russian Empire, the rich mineral province of Galicia, taken from Austria, and the "corridor" to the Baltic Sea, drained by the Vistula, taken from Germany, which did not include the port of Danzig. This German city, with a small adjacent territory, became a Free State, but Poland was given the use of its wharves and some control in its government, especially with regard to its foreign relations. There had been a powerful kingdom of Poland in the Middle Ages, and the country had kept its independence

until it was "partitioned" among Prussia, Austria, and Russia near the end of the eighteenth century

The boundaries of the new state are very uncertain, and it is not possible to give exact information about its size and population, but its area is, roughly, about equal to that of Great Britain, and its population about three times that of London. The majority of the people are of Polish birth, but the country also contains many Russians, Lithuanians, and Germans, as well as a large number of Jews. It is said that half of the entire Jewish race have made their homes in this country. The principle of "self-determination," therefore, only applies to the majority of the population of Poland.

Poland is for the most part an agricultural country raising considerable crops of wheat, rye, barley, oats, and potatoes, as well as lesser quantities of sugar-beet, hemp, hops, tobacco, and chicory. In ordinary times the pastures and forest-lands provide sustenance for large numbers of horses, cattle, sheep, and pigs. There is also great mineral wealth in the land, especially in the south, including coal and iron, as well as inexhaustible supplies of salt and petroleum. The forests provide an ample supply of wood-pulp for paper-making, and there are many textile factories. The chief industrial centres are Warsaw, Lodz, and Cracow. In spite of its antiquity as a separate nation, therefore, Poland is a new country in the modern world. Granted peace, settled government, and supplies of

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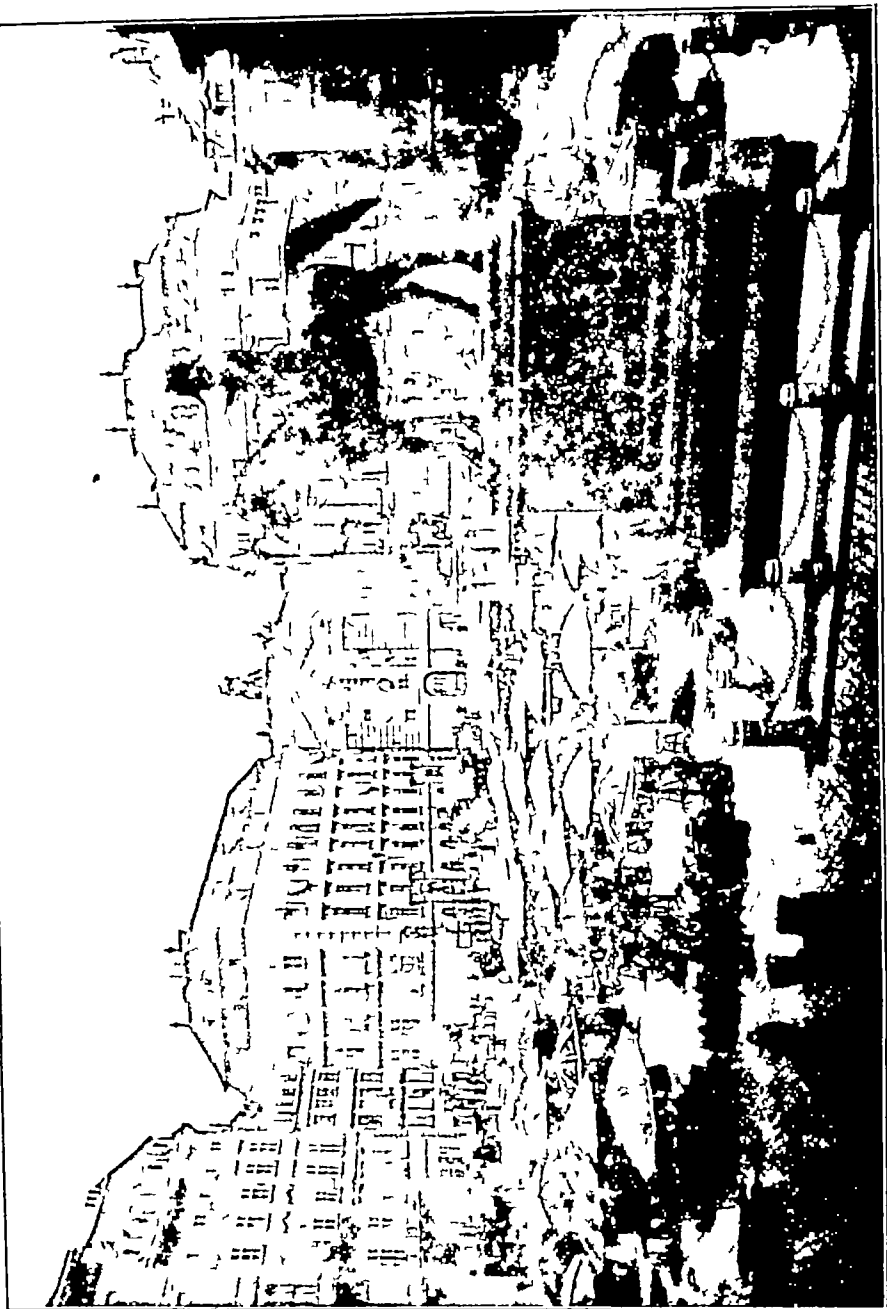
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capital, it is capable, so far as its natural wealth is concerned, of taking a prominent position among the states of Central Europe

### CZECHO-SLOVAKIA

There existed in the Middle Ages a powerful Bohemian kingdom, which had access to the Baltic Sea, and distinguished itself in the religious wars following the Reformation, fighting fiercely on the Protestant side. The Bohemians have preserved their traditions and remained a separate people in spite of their association with Austria, and, when the war gave them their opportunity, they united with Moravia, part of Silesia, and other territories to the eastward to form a new state to be known as the Republic of Czecho-Slovakia because it was peopled, for the most part, by the Czechs of Bohemia and the Slovaks who lived to the east of them. The new state is about equal in size to England and Wales, and has a population about twice that of London.

The new country consists mainly of agricultural or forest land, and the products are similar to those of Poland, but Bohemia is rich in minerals and has many thriving industries. Coal and iron are extensively mined, and steel is made in increasing quantities. Textiles and glass are manufactured, as well as large quantities of beet-sugar and beer. Other minerals, such as copper, zinc, and antimony,



*The Vienna Company*

MARKET PLACE, VIENNA

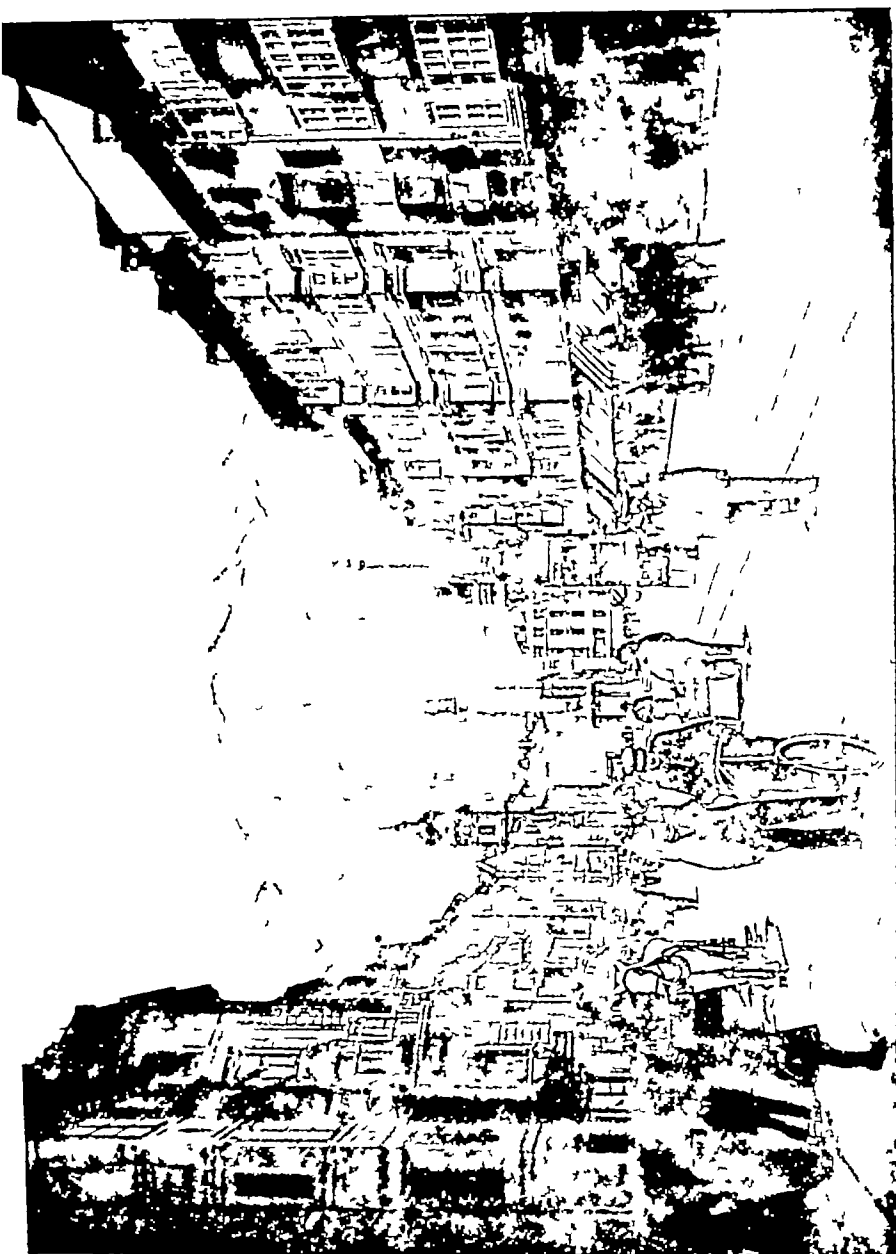
are mined in Slovakia, and in this country the industries are capable of great development. The chief centres of population are Prague in Bohemia and Brunn in Moravia. The state has the right to use certain wharves in the ports of Hamburg and Stettin. This modern method of giving an inland state access to the sea is worth noting.

### AUSTRIA

The new and much-restricted Austria (about equal in area to Scotland) was, roughly, the old Austria proper of the very composite Empire. In the north it is mainly agricultural and pastoral, growing grain and grapes and feeding horses and cattle. Most of the minerals have been taken away, but some salt, coal, and iron are left, and textiles, pianos, and motor cars are manufactured. In the south-west lies the Alpine region of the Tyrol, in which mining and manufacturing are carried on to a limited extent. Vienna, once the proud imperial capital, is still the chief centre of population with nearly two million people, and the next in order are Graz, Linz, and Innsbruck. A certain amount of external trade is carried on, chiefly with Great Britain, the leading exports being timber, fruit, sugar-beet, paper goods, furniture, and chemicals.

### HUNGARY

This state has been reduced in size and population so that it is now about equal to Austria. It is also



[F 1006 from Comfary]

A STREET IN INNSBRUCK



for the most part an agricultural country, raising large crops of wheat and maize as well as lesser quantities of rye, barley, oats, potatoes, and tobacco. The vine is also cultivated, and wine is manufactured, especially at Tokay. Horses of a special light breed are reared in large numbers. Nearly all the mineral resources of the pre-war Hungary have been lost to Czecho-Slovakia and Rumania. A little coal is mined, but not nearly enough even for the flour-mills of Buda-Pest, the capital of this new Magyar republic. The second largest town is Szegedin near the southern frontier.

### RUMANIA

This country took the side of the Allies in the war, and at the peace was given a large part of Hungary as well as some Russian territory. It is still a kingdom, and has an area rather larger than that of the British Isles, with a population of about seventeen millions.

About 80 per cent of the population of Rumania are engaged in agriculture, and the chief crops are maize, wheat, barley, oats, and rye, while tobacco is largely cultivated in Transylvania. There are wide forests both in this province and in the old kingdom, timber being an important export. Coal as well as copper, and iron ores as well as salt, are mined, and there are a large number of petroleum springs, the export of this oil being enormous.

Rumania engages also in brewing, distilling, and flour-milling, and exports a good deal of flour. Bucharest is the capital, and Galatz and Braila on the Black Sea are the chief ports

### JUGO-SLAVIA

We have now dealt briefly with the regions which formed part of the Austro-Hungarian Empire and with those countries which have profited by its fall

The new Serb-Croat-Slovene kingdom, with an extensive sea-board on the Adriatic, is generally known as Jugo-Slavia. It has an area rather larger than that of the British Isles, and a population about twice that of London. Serbia is the predominant partner, while the old Austrian provinces of Bosnia and Herzegovina, as well as Montenegro, are also included. The new state includes people of varied races and different religions, and is rather an experiment in amalgamation than a good example of self-determination.

Jugo-Slavia is mainly agricultural, producing some grain and a great deal of fruit, especially the plums from which prunes are made. A great deal of the land is pastoral, and there are extensive forests, as well as considerable mineral resources, including coal, iron, copper, gold, and cement. Belgrade is the capital, and Zagreb and Sarajevo are the next towns in importance.

## THE EXTENSIONS OF THE LEADING NATIONS

It is the ambition of most of the Great Powers to have a "colonial empire" Of course, Britain is the shining example in this matter, and her great wealth is usually attributed, by people who think carelessly, entirely to her oversea "possessions" In earlier books of this series I have tried to show that Britain does not "possess" Canada, Australia, New Zealand, and South Africa, but is in close partnership with each of them, and that we do not "possess" even India, but administer it, partly for the good of its own people, partly because we wish to keep its valuable markets open to our commerce We may be said, more correctly, to "possess" certain extensive portions of the hot regions of the world, which are used for supplies of such things as sugar, rubber, ivory, gold, oil-nuts, copra, cotton, and other things which cannot be got from temperate lands, and it is, on the whole, this type of "colony" which the other Great Powers also desire to possess, for the above-named products are very useful, if not indispensable, in modern life

It was Spain that led the way in the establishment of oversea colonies, and her idea of a settlement was a region where wealth could be quickly won and from whence it could be easily carried back to Spain to be enjoyed Then France began colonising, but she

had, on the whole, a nobler idea of oversea dominions, as the French-Canadians testify to this day, namely, the setting up of new homes for the more adventurous and enterprising of her own people. Britain came next into the field, and proceeded to set up colonies by the side of those of the French in the New World, impelled partly by the same idea of making new and permanent homes for those of her people who wished to leave their native land for one reason or another. French and English came to blows in the Old World and in the New, with the ultimate result that France lost her American Empire, and Britain then set out on that wonderful career which has resulted in the formation of the British Empire of to-day, and which even the loss of her first American colonies could not check. So Britain became the great example in colonial matters, and a glance at an Empire map will remind you where she has set her foot.

Let us now consider, for a few moments, the way in which the other Great Powers of Europe have endeavoured to extend their boundaries beyond the borders of that continent. Russia turned first to the East and began the conquest of Siberia in the sixteenth century, about the time of the Spanish Armada. Here is an extensive region occupying the whole of Northern Asia, and, so far as area goes, one would have thought it would satisfy a great and growing Empire. But geography reveals its limitations. In all its wide extent it contains no ice-free

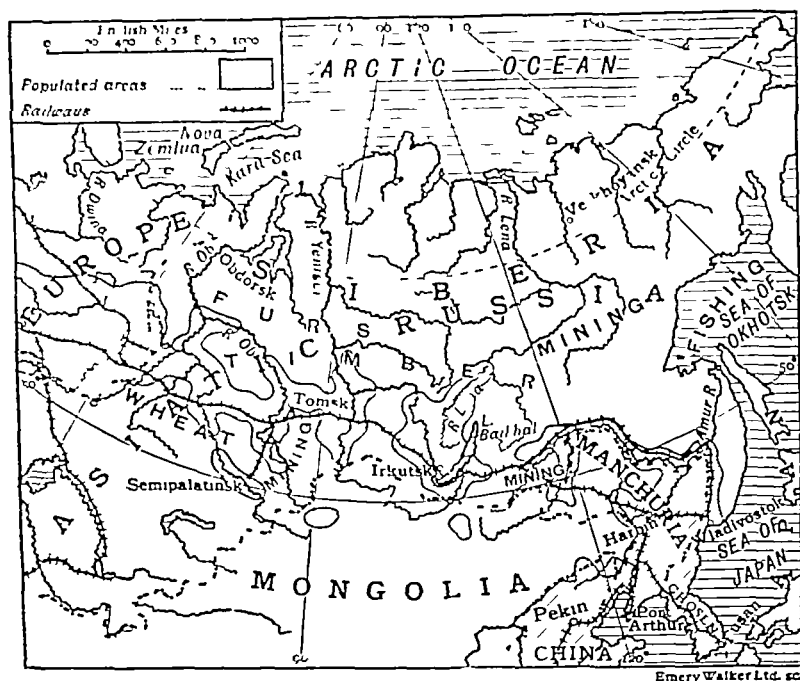
port, and when Russia wished for such a terminus to her Trans-Siberian Railway she was obliged to take one from China under cover of a "lease," and came to blows with Japan over the matter, for the Siberian harbour of Vladivostok is closed by ice for a considerable portion of each year. But Siberia is not entirely made up of ice-bound rivers, snow-covered plains, and inhospitable coast on an Arctic sea. It contains great mineral wealth and, better still, wide tracts of fertile soil and rich pasture-lands, which are now being opened up by the Trans-Siberian Railway.

The Trans-Siberian line and its immediate vicinity practically constitutes Siberia, so far as white people are concerned, and to take a general survey of the line and its activities is really the best method of gaining some idea of the geography of Southern Siberia, which now forms the Far-Eastern Republic. There were two points of approach to the great railway in the Far East, namely, the Russian port of Vladivostok at the northern end of the Sea of Japan, and Dalny, a seaport on the Liao-tung Peninsula in the Chinese province of Manchuria,<sup>1</sup> and these were the two chief starting-points for travellers coming from Japan and China who wished to travel by the overland route to Western Europe. The lines from each of these seaports unite at Kharbine.

<sup>1</sup> The southern part of this peninsula now belongs to Japan whose Governor-General resides at Dalny (Dairen), which has a fine harbour ice free all the year round.

or Harbin on the Sungari River, and from this junction the railway runs north-west into Siberia

The line now passes due west to Lake Baikal, across which the railway traffic was at first carried by means of a large boat adapted for ice-breaking



POPULATED AREAS OF ASIA IN RELATION TO COMMUNICATIONS  
AND PRODUCTS

in the winter months, while in the most severe weather, when the ice on the great lake was very thick, passengers and goods were sent across either in sledges or in trains travelling on lines laid on the ice. These methods were used before the commencement of the line round the head of the lake. The

line next runs westward to the neighbourhood of Irkutsk, and thence for a journey of about six days to Moscow. Part of the route goes through cuttings made in dense forest, and then across the open steppe to the Ural Mountains. In the open country there are stations at intervals of about twenty miles, which it is hoped will become centres of settlement for farmers from the southern plains of Russia-in-Europe. At present the chief centres of population are Krasnoyarsk, Tomsk, and Omsk, on or near the railway, while Tobolsk and Yeniseisk lie at a considerable distance from it.

The general character of the Trans-Siberian roadside station is shown in the picture on page 201, and one of the most interesting and characteristic features is the presence of the shop, in this case that of a seller of precious stones. You will be able to form your own opinion as to the physical character of the Russian *muzik* or peasant-farmer from some of the men in this picture, who are awaiting the arrival of the train, but for the rest the station might be that of an English village or small town.

Germany's colonial expansion had on the whole taken the form of a search for those territories which would provide the Fatherland with colonial products, and these territories were mostly discovered in Africa, including German East Africa, German South-west Africa, with Kamerun and Togo on the Gulf of Guinea. In Asia the Germans obtained a large portion of New Guinea as well as a few small

islands in the Pacific Ocean The general intention was to follow the British example with regard to oversea trade, and to keep communications open by means of a strong navy The products raised in these German colonies were similar to those of British colonial dependencies in Africa and South-eastern Asia—palm-oil, coffee, cocoa, and tobacco from Togo, rubber from Kamerun, cattle, sheep, and various animal products, as well as manures and copper-ore, from South-west Africa, rubber, copra, iron, and coffee from East Africa After the war Germany lost all her colonies, which were placed under the "direction" of Britain, France, or Japan

As you have already learnt, France attempted to found an Indian Empire in days gone by, and to set up a New France in North America, but in each region was ultimately forced to yield to British arms But France has now a very considerable colonial empire, which is chiefly situated in Africa and South-eastern Asia, and her foreign territories have been acquired mainly in order to build up a great trade The North African province of Algeria is regarded not as a colony but as part of France, and to the south of this province lie extensive French territories stretching across the Sahara desert to the northern and eastern coasts of the Gulf of Guinea From what you know of the products of British territories in this African region you will be able to deduce the nature of the products supplied to France from her African posses-



sions, not forgetting the demands of her thriving motor industry upon the tropical plantations near the Congo River

The leading French territory in Asia, so far as area is concerned, is that which lies between Siam and the China Sea, and which is divided into four chief parts. From Annam the Republic draws sugar, rice, and cotton, from Cambodia rice, spices, tobacco, cotton, sugar, and indigo, from Cochin-China rice and rubber, and from Tongking enormous quantities of rice. All these products, as you will see, are of a kind which cannot be obtained from France itself. There are also certain of the West Indian islands in the hands of France, and these send out the tropical and semi-tropical products which our own West Indian plantations send to Bristol and Liverpool, chiefly cane sugar and semi-tropical fruits, including large quantities of limes and bananas. The large island of Madagascar in the western portion of the Indian Ocean is also under French government, and exports great quantities of rubber, not only to Marseilles, but also to London and Hamburg. This island is rich in minerals of all kinds, which might be worked more fully to the great advantage of France. An interesting mineral is corundum, which can be made up into wheels of great hardness and durability, used for grinding all kinds of material, and now rapidly taking the place of the lathe in many industries.

The United States has expanded beyond her own

borders by taking over the government of the north-western part of the North American continent, which is known as the territory of Alaska, and which was purchased from Russia in 1867. The area of Alaska is nearly five times that of the United Kingdom, but the population numbers only about 70,000, of whom about half are whites, the rest being Red Indians, Eskimos, Chinese, Japanese, and negroes. The largest settlement and seat of government is Juneau. As we might expect from its latitude, Alaska has a very severe climate, and it is unlikely that it will ever provide a home for large numbers of white people. The leading industries are seal- and salmon-fishing and mining, for gold is worked in the south-eastern portion of the territory, and the famous Yukon mines are situated near the eastern border, but, of course, on the Canadian side.

The Sandwich Islands in mid-Pacific also belong to the United States, the principal island of the group being Hawaii. The soil of these volcanic islands is very productive, and the chief crops are those of sugar and pine-apples. Hawaii is a port of call for liners from San Francisco and Victoria (British Columbia), as well as from Tokio and the leading ports of New Zealand and Australia. After the Spanish-American War the United States took over the government of the Philippine Islands, an extensive group lying to the south-east of Asia, as well as the island of Porto Rico in the West Indies. The chief products of the Philippines are rice, copra,

hemp, sugar, maize, and tobacco, and there are valuable forests of gums and dye-woods, but the people of the islands are not very enterprising. Porto Rico is more up-to-date, and produces large quantities of sugar, tobacco, coffee, and sea-island cotton, as well as minerals of various kinds, including a large quantity of salt.



THE SUGAR CANE HARVEST, CUBA

[11] Underwood

## PART IV

### SOME COMMERCIAL STUDIES

#### THE LESSER COUNTRIES OF EUROPE

##### NORTHERN

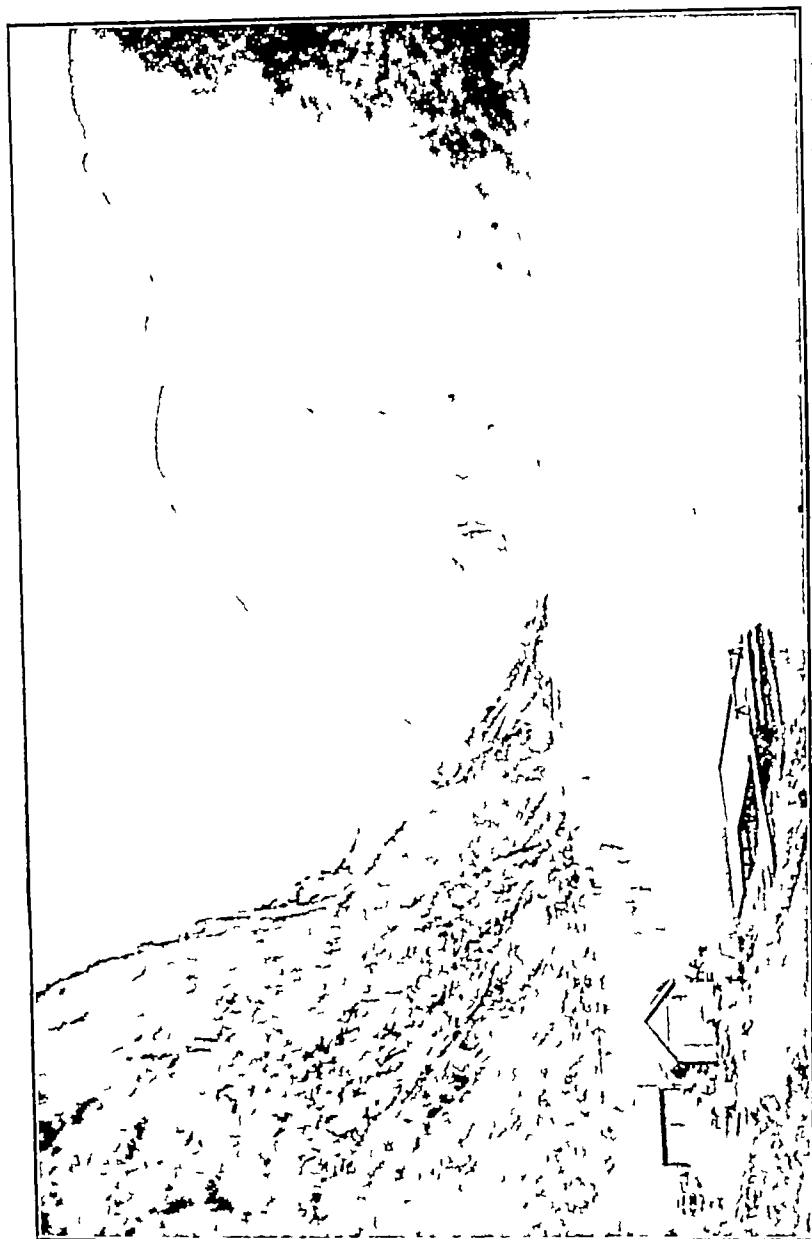
A GLANCE at the map of Europe quickly shows us that the whole of the Continent is not occupied by the territory of the Great Powers, but that Europe contains a number of smaller nations, each of which is making a determined effort to retain its own individuality, though it may have a small population and be comparatively poor in purse, while its weight in the councils of Europe may be very light indeed. Let us consider, for a few moments, the geographical situation of each of these "Lesser Powers," and find out in what way the country is contributing to modern life and activity. We shall consider first those smaller nations which are nearer neighbours to Britain, namely Norway, Sweden, Denmark, Holland, and Belgium.

Norway forms the western part of the Scandinavian Peninsula, and constitutes a kingdom whose

integrity and neutrality were guaranteed by Great Britain, France, Germany, and Russia in the year 1907. This country is united by many ties of old association and common interest to our own country, and the commercial relations between the two kingdoms are very close, for in spite of her comparatively small useful area and scanty population Norway is able to supply certain useful commodities in which Britain is lacking, perhaps the most important being timber. The Norwegian area under forest is about equal to that of the whole of Scotland, and of this about three-fourths is under pine-trees, the softer varieties of which are used for making wood pulp. This material is now largely employed in the manufacture of the less expensive varieties of paper. Some of the forests are owned by the State, while others are leased or held by companies and private owners, and great care is taken by the foresters to prevent waste, and to re-plant in areas where the trees have been cut down. The timber not used for pulping down is exported in the form of poles for telegraphs and scaffoldings, pit-props, and beams, while some is made up into doors, window-frames, and other useful articles for building or furnishing. The three chief outlets for Norwegian trade are Christiania, Bergen, and Trondhjem.

Large numbers of Norwegians are engaged in fishing for cod, herrings, and mackerel, salmon and sea-trout, while in the more northerly seas the whale, walrus, and seal are largely taken. The Norwegian

NARRO FJORD, NORWAY



cod-fishery is carried on partly for procuring the liver-oil which is so useful as a medicine and for building up the tissues of growing children. Silver, copper, and iron are mined, but this industry is small compared with the mining work of the Great Powers, Norway employing in all about as many people as would be necessary for two or three of the larger British coal-mines.

Sweden was at one time united with Norway to form one kingdom, but the union between the two countries was dissolved in 1905. Sweden is larger, wealthier, and more populous than Norway, and its trade connections and national sympathies were rather with Germany, which it regarded as a possible bulwark against the supposed designs of Russia for expansion westward. Britain is now, however, Sweden's best customer, sending her in payment coal, machinery, and cotton piece-goods. Moreover, there is a very old treaty between England and Sweden which makes commerce easier between the two countries by what is known as the "most favoured nation" arrangement, for Sweden has much to offer which is useful to Britain, and needs many things which Britain is only too ready to supply.

Her chief export to this country is timber in various forms, nearly half of it being pulped before export to be used in our mills for making paper. A large amount is made up into coarse packing-paper in Swedish mills, and exported to this country.

Doors, window-frames, beams, rafters, eaves, and other building materials are cut from new wood and sent to help in our jerry-building, for timber should always be kept until it is seasoned before being made up, if it is to be prevented from warping, and the Swedish timber trade has a great deal to do with our daughtly houses. Much of the timber cut in Swedish forests is used for making railway sleepers, telegraph and scaffolding poles, masts for ships, and pit-props, as well as for making matches and firewood.

Sweden has rich deposits of iron-ore, most of it of very fine quality—one field lying to the north-west of the Gulf of Bothnia and having its outlet in the port of Lulea, the other in the central province of Svealand with its port at Oxelsund, south of the capital city, Stockholm. There are a considerable number of Swedish furnaces for the production of pig- and bar-iron, as well as steel of excellent quality. Silver, lead, zinc, and copper are also mined in various parts of the country. Sweden is, moreover, a busy agricultural country, with large numbers of up-to-date dairy-farms, which export an enormous quantity of butter to Britain every year.

The little country of Denmark is also closely connected with Britain, partly through historic associations, partly because it has recently developed a great farming industry, which supplies some of the deficiencies of Britain in this respect. Butter, bacon, and eggs, to the value of nearly 20 million



pounds, are sent from Denmark to Britain every year, and these things are paid for partly by the export of coal, cotton piece-goods, and ironwork. The Danes are a thrifty, determined, enterprising race, who have created dairy-farms in many most unlikely places, and who take a pride in turning out goods of the finest quality. They study farming in a scientific manner, and take the greatest care to secure absolute cleanliness in the preparation of their food-stuffs. They grow the sugar-beet in many places which were once mere sand-dunes, and produce a great deal of beet-sugar for their own use. They also take an enormous quantity of fish in the sounds and shallow waters of their low-lying coasts.

Holland is another farming country which has close trade connections with Great Britain. She is a treeless land, with very little coal, and has been forced to rely upon her farms, fisheries, and sea trade for her livelihood. In each of these directions, however, she has displayed wonderful energy and ingenuity, and as farmers and traders especially the Dutch stand second to none. One of the leading exports to Britain is margarine, and this butter-substitute typifies Dutch activity in farming and colonising. The better qualities of margarine are now made partly of milk from the Dutch farms, and partly from the kernel of the cocoa-nut, which is brought from the Dutch East Indies. Holland's export of real butter is also very large, and she now grows an enormous quantity of the sugar-beet. She

intercepts some of the wood-pulp from Scandinavia



DUTCH GIRLS

[Photochrom Company.]

and Russia, and makes it into paper, some of which she sends to us , and she has recently developed a

great condensed-milk industry, while her re-export of rice from the Dutch East Indies is very considerable. Holland is, moreover, our great storehouse for seeds and bulbs of various kinds, as her market- and flower-gardens are some of the best in the world.

We are apt to think of Belgium as an industrial country like our own North and Midlands, and forget her farmers and the valuable work which they do. This is a mistake, for the farms of Belgium produce large quantities of rye, oats, and barley, as well as potatoes and beet-sugar. Flanders horses are also famous throughout the world, and cattle and pigs are raised in large numbers. Belgium has a great deal of coal, but it lies for the most part at a considerable depth, and a large amount of this mineral must be imported to keep her busy industries going. Iron-ore is also extensively mined, but this ore, too, must be imported from Luxembourg to supply the works which turn out great quantities of pig-iron and steel, especially steel rails. The country also needs a great deal of coal for her mills, which produce cotton, linen and woollen goods in large quantities. Belgium has a great world-trade, and owns the Belgian Congo State in West Africa, which supplies her busy motor-car factories with the necessary rubber.

These, then, are the "little peoples" of the north-west of Europe, each with its own national character and individuality, each capable of conducting its own affairs and of contributing something material and moral to the world's stock. Each has a right

to its own independence and to hold up its head among the nations, for each is full of enterprise and new ideas. It is not necessary to look to the Great Powers for these things, indeed, some of the cleverest inventors, organisers, writers, and scholars have sprung from among the "little peoples"

### SOUTHERN

Among the "little peoples" of Northern Europe the Dutch have had perhaps the greatest place in history. There was a time when they were first upon the ocean, and the British had many a stern fight with them for sea-power. In the south of Europe Spain occupies a somewhat similar position, for, though she does not now rank as a Great Power, she was once the greatest Power in the world, as our history-books do not fail to show us, and it is interesting to note that Holland checked her on land and Britain on the sea. But I have no space to go fully into these entrancing historical matters, our present concern is with the condition of Spain to-day, and its prospects for the future.

With an area roughly one and a half times that of the United Kingdom, Spain has a population of about twenty-one millions compared with the forty-seven of Britain. The yearly trade of the United Kingdom has sixteen times the value of that of Spain. Her navy and army are now ridiculously small. She has lost all her American and East Indian colonies

Yet many parts of this country are wonderfully fertile. There are in the north plentiful supplies of valuable minerals. Though the climate of some parts of the peninsula is enervating and does not encourage hard work, the people are naturally quick and clever. What is wrong with Spain?

For many generations she has been badly governed—that is to say, she has been administered in the interests of the ruling class, who have regarded the majority of the people as ministers to their needs and fancies. For generations the land was torn and impoverished by foreign wars and civil strife. These struggles, of course, as war always does, carried off the best and bravest of the land, while the insecurity of life in the peninsula caused a further drain upon the manhood of the country by emigration, chiefly to South America.

There are very few good roads in the country districts, and only a few years ago it was estimated that there were no less than 5000 villages which could only be reached on foot. Education is in a very backward condition, and three out of every four of the people are unable to read and write. The commonest means of conveyance are the pack-mule and the ox-cart, and though railways have been built in some parts, they are usually badly managed, and regarded chiefly as conveniences for the military. Heavy taxes are laid upon the farmers, and this discourages improvement in methods of agriculture. The stock-farms are largely run to breed bulls for

fighting in the ring on the frequent festal days of the Spanish workers And if a determined reformer were to arise to save the people from themselves



*Photo Unterwies*

THE ALHAMBRA, GRANADA, SPAIN

he would doubtless pay for his unselfish zeal with his life

Yet a great deal of trade is done by Spain, chiefly

with France, the United Kingdom, and the United States, in this order, for Spain has a great deal to offer to go-ahead countries like these, and the exchange which she makes with our own country may be taken on the whole as typical of the rest. By far the most valuable of her exports to us is the iron-ore, which is taken from the slopes of the Cantabrian Mountains, and is of very fine quality indeed. Oranges and raisins take the second place in the list of exports, and the former include the bitter Seville variety, which are used for making marmalade. We also take an enormous quantity of onions from Spain, and a great deal of cork, which consists of the bark of the cork oak, as well as a small amount of copper-ore, a larger quantity of quicksilver and a considerable amount of esparto grass, which is used for making paper. In exchange for these things we send to Spain coal, iron, both wrought and unwrought, manures, textiles, chiefly cotton, ships and boats. Our chief gateway into Spain is Bilbao, while Barcelona and Valencia are the chief ports on the Mediterranean.

Portugal is rather larger than Ireland, and has a population about equal to that of London with its suburbs. It is a rocky country, of which nearly half the area is waste and one-fifth forest-land, but in the river valleys the land is highly fertile, and produces the vine and a great deal of fruit, as well as sufficient meal for the bread of the people, though wheat must be got from abroad. Wine is the most

important product and by far the leading export, the second place being taken by cork both in the



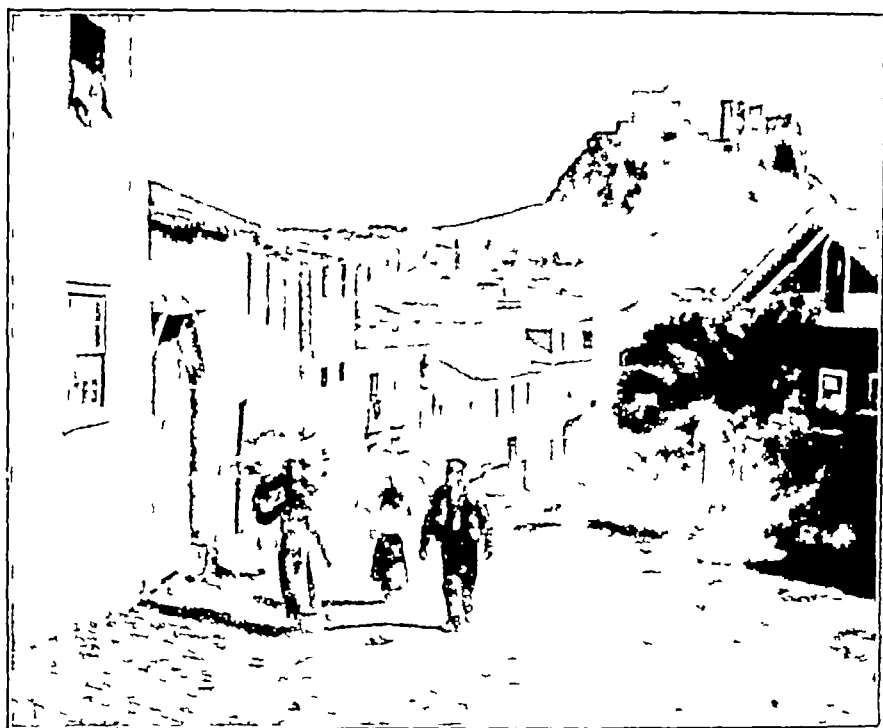
(Photo Underwood)

POTTERY VENDORS IN MARKET SQUARE VALENCIA SPAIN

form of bark and made up into various articles A great deal of fish is taken, and dried fish forms



a profitable export There is considerable mineral wealth in the country, and a great deal of copper is sent out, though coal must be imported, as well as iron and steel, hardware, and machinery Britain



LEIRIA (PORTUGAL) AND ITS RUINED CASTLE NOTED IN MOORISH TIMES

pays with these things, as well as with cotton piece-goods, for the wine, cork, and fruit which she draws from Portugal Portugal has in past ages been a great coloniser, and still has extensive colonial possessions in Africa and South-eastern Asia, which supply her with rubber and other tropical products

In the south-eastern portion of Europe there are a number of separate states which take rank also among the "little peoples" of present-day Europe. At one time these Christian kingdoms were under the control of Mohammedan Turkey, but step by step the yoke of the Sultan was thrown off, and before the beginning of the Great War in 1914 the European dominions of this monarch comprised only the small territory to the north of the Sea of Marmora. Among the regenerated countries of this region perhaps the most interesting from a historical and intellectual point of view is Greece, which occupies the southern part of the peninsula, and includes a large number of islands in the Ægean Sea. It is mainly an agricultural country, and almost entirely dependent upon the products of the soil, but owing to the rocky character of the land only about one-fifth is cultivated. Under Turkish rule, or rather misrule, the country got into a very backward condition, but now irrigation-works and drainage-canals are being constructed, farm-roads and up-to-date buildings are being built, tree-planting is extending, and the breed of cattle is being improved. The vine is largely cultivated in the sheltered valleys, and currants and raisins are exported in great quantities, especially to Britain, being paid for chiefly by the export of cotton piece-goods.

Serbia and Rumania have been dealt with in a previous chapter in connection with the break-up of the Austro-Hungarian Empire. Here is another

Balkan country, with its coast-line upon the Adriatic, known as Albania, which was declared independent of Turkey in 1912. The country was given a foreign ruler in Prince William of Wied, but when the war broke out in 1914 he left the country, which fell into a state of anarchy. Austria overran the country, but in 1917 Italy proclaimed its independence, and it was placed under the government of a Council of Regents, being admitted a member of the League of Nations. A great part of the land is uncultivated, and the agricultural methods of the remainder are very primitive. Tobacco, wool, and olive-oil are the principal products, and the country is said to possess useful minerals, which, as yet, have not been worked. Scutari and Durazzo, the provisional capital, are the chief towns.

South of Rumania lies the Slav kingdom of Bulgaria, with a water frontier on the Black Sea and (before the war) on the Ægean also. During the war Bulgaria took the part of Germany and Austria, and when peace was concluded Bulgaria ceded Thrace to Greece and a strip of territory on the north-west frontier to Serbia. She thus lost her coast-line on the Ægean Sea, but was given facilities for sending out her products from its ports. About five-sevenths of the people are engaged on the land, in ordinary farming, pasturing, or forestry. As in Rumania, great quantities of wheat and maize are raised, and the animals on the pastures include large numbers of mules and asses, which are very useful as pack-

bearers in the mountain regions. The mountain-sides are extensively quarried for building-stone, which is of excellent quality, while gold, silver, lead, and copper are known to exist, though they are not worked to any great extent. All minerals belong by law to the State, which has granted concessions for the working of coal in several districts. Austria takes most of the exports over the Danube and the railroad routes, while Belgium and the United States have been Bulgaria's most prominent customers by way of the Black Sea, the chief outlet being Varna. The city of Sofia is the capital.

## TRADING SPHERES AND TRADERS

LET us pause for a short time to take stock of our present position in our review of the nations of the world, and of the way in which they have divided up the surface of the globe among themselves.

We began this review by considering the present position of our own country, regarding it first as a group of islands lying to the north-west of Europe. Then we looked upon it as the centre of a world-wide Empire, and found that we must include within the term Britain not only Great Britain, but also the Greater Britains beyond the seas—Canada, Australia, New Zealand, and South Africa. We saw also that the British World included the great Indian Empire and a number of more or less extensive territories in

various parts of the globe, which were governed by Britain in Europe. Having reached this stage, we found that we had mapped out a very considerable portion of the land surface of the globe under the general term of the British Empire.

Then we looked upon the United Kingdom as one of the eight Great Powers of the pre-war period, six of which were in Europe, the other two being the United States and Japan, and we spent a little time in noting the home and foreign activities of each of these Great Powers, and in tracing the drastic effect of the War upon three of them. When this review was completed, we found that we had covered by far the greater portion of the surface of the globe. Let us now glance at a map of the world in order to find out which portions of the earth's surface are not under the control of these Great Powers, neglecting the territory of the Lesser Powers of Europe, which we have already considered.

One of the first great territories which meet our eye is the Chinese Empire in the eastern part of Asia, and in the south-west of this great continent lie the countries of Persia, Turkey, and Arabia. Passing to the New World we have Mexico in North America, Central America, and the whole of the continent of South America. These are the chief territories which are yet to be considered, but before we begin to inquire into their extent, resources, and activities we must come to some agreement as to the manner in which we are to regard them.

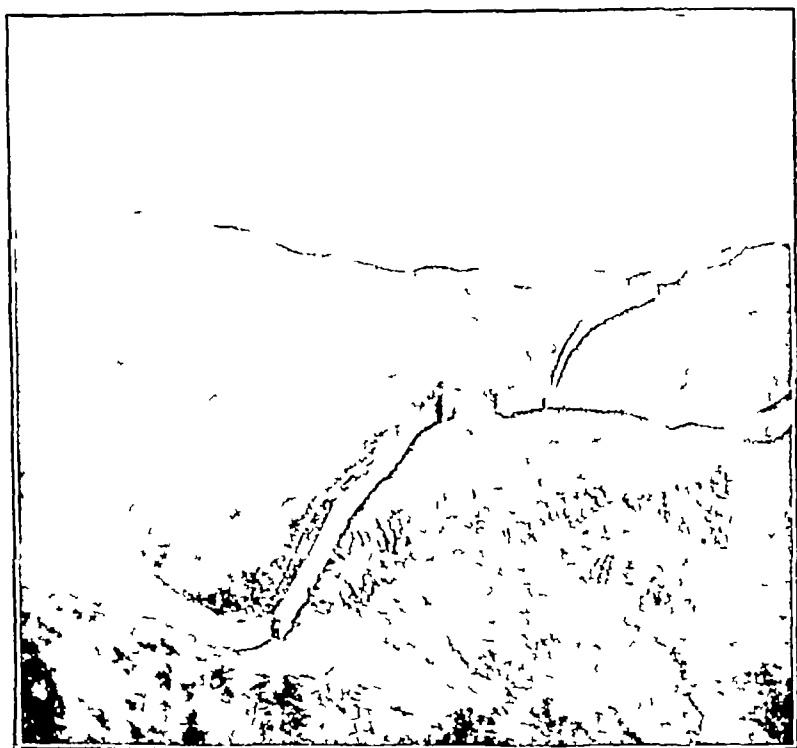
I have given this fourth section of our book the title of "Some Commercial Studies." Now, you may very reasonably say that this section must cover the whole world, and that once again the Great Powers must take the foremost place, to the subordination of the other countries. This is perfectly true, and we must keep well in mind the fact that the Great Powers have become great owing largely to their trade. They are the leading traders, and the chief trade of the world consists of exchange of their commodities. We have studied some aspect of this exchange in every chapter of this book, so that from the first page we have been in a sense considering the whole commercial world. But now I wish to supplement this trade study by considering in turn each of the wide territories which lie outside the sphere of government of the Great Powers—China, South-western Asia, Mexico, Central America, and South America, and I want you to look upon each of these territories largely as spheres of activity on the part of the leading traders of the world who live in Europe, the United States, and Japan, for we shall find these people busily at work in the Far East, in Central and South America, and even in the more or less desert regions of South-western Asia.

You may think that I am becoming very Prussian in my division of the earth's surface, for I seem to be making *power* and *force* and *might* the chief things in the world, as the boys and girls in Germany were once taught. If you think this you do me an injustice,

for the British view of the matter is this—that the markets of the world ought to be open to the trading enterprise of all the nations which have won a right to the name, and which are prepared to “play the game,” to deal out truth and justice to all the others. The only “might” worth considering is the might of unceasing, intelligent work and bold but peaceful enterprise. We are ready to take off our hats to any nation when it wins commercial success by fair means, by hard work and pluck and enterprise, and if we are beaten in any direction we shrug our shoulders, smile, rub our eyes, give ourselves a shake, and generally “wake up” to “make things hum” for ourselves and our rivals.

For though we are great traders, great manufacturers, great colonisers, and great financiers, we are not the only people who excel in these matters. Before the war we allowed the Germans to gain upon us not only as traders, but also as manufacturers, and they took many of our markets from us in various parts of the world. The United States also excelled us in manufactures owing chiefly to her great natural resources in minerals and food-stuffs. There will be keen war when all war is over if we are to keep our place among the Great Powers, but it will be the peaceful war of which the issue will depend upon the use we make of our brains and energy. It is a contest worthy of all the pluck which the ordinary kind of murderous war demands of those who take part in it.

Let us now learn a little about the Chinese Empire, bringing it into the circle of the modern world's activities in the manner which I have indicated. You cannot detach it from the rest of the nations, for in



PART OF THE GREAT WALL OF CHINA

the present state of things no country on the face of the globe can isolate itself and say, "I will keep my own house in order and have nothing to do with the rest of the world." You cannot build a Great Wall of China round any territory known to man in our restless, enterprising, interesting life of to-day



## THE CHINESE PEOPLE AND THEIR HOME

## I

CHINA was one of the oldest monarchies when suddenly, as history counts suddenness, she became a republic under a President to be elected for a term of five years. This was in the year 1912. The first President of the new State was Yuan Shih-K'ai, and he had as Political Adviser a British doctor named Morrison, whose duty it was to direct the new Government on modern lines. This was a tremendous change in the land of China, which had for more than two thousand years remained in more or less strict seclusion, jealously regarding its privacy and steadily refusing to have anything to do with "foreign devils." But the fact that the change could be made showed that China was not quite out of the world, and was not prepared to be parcelled out among the Powers, which at one time appeared to be her ultimate fate.

It will be a very long time, however, before China becomes a modern State, though when that great change has been wrought she will form a country to be reckoned with, for, according to her present "census," which is little more than an estimate, the new Republic, which does not include Tibet and Mongolia, contains about three hundred and two millions of people. Germany prided herself upon her "man power," but here is a State containing five

times as many people Russia was the most populous of the Great Powers, but China has three times as many people And the example of Japan has proved to the world that people of Yellow Race can learn from the West the lessons which, when properly learnt, lead to "power," as the modern world understands the word The possibilities of this great yellow population so impressed the German Kaiser William II that at one time he tried to arouse the Western nations of the world to a realisation of the threatening nature of the "Yellow Peril", and he painted a picture showing the representatives of these nations standing more or less shoulder to shoulder against this peril, with himself, or at least Germany, at the head of the phalanx



[Photochrom Company]

A CHINESE MAIDEN

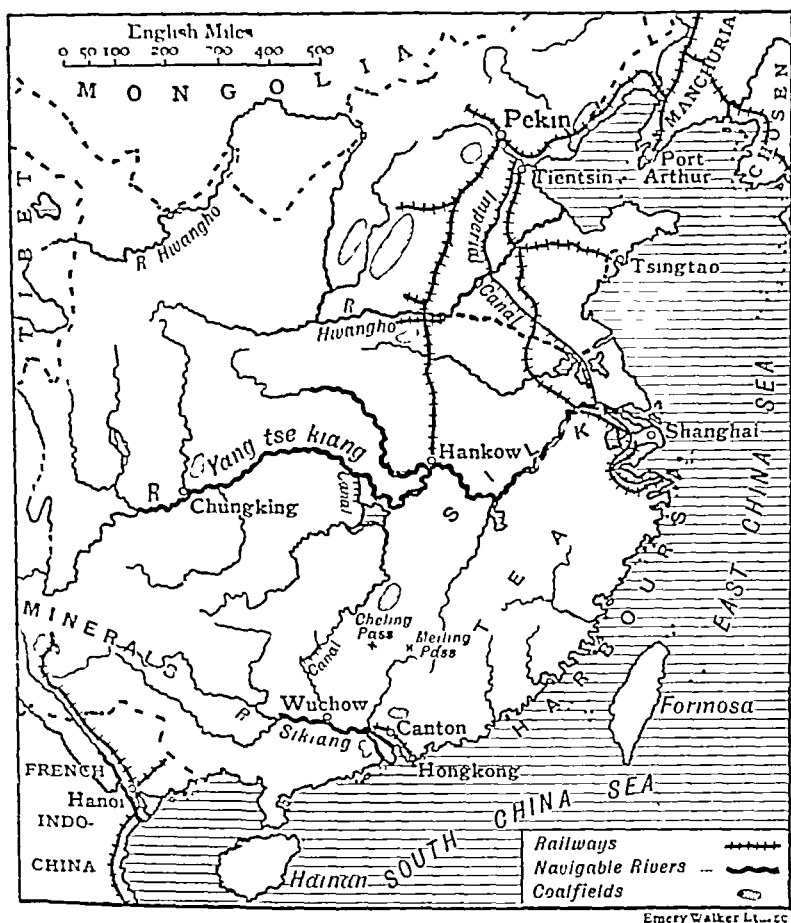
Though we may smile at this scare-mongering, the fact remains that China has actually awakened, and that there is a widespread desire among her millions of people to learn from Western nations The country has always been a worshipper of learning, and had a careful system of public examinations

much more searching than any to which you have ever been subjected. But the learning was solely concerned with Chinese matters, and now the great desire is to get "Western knowledge," and schools are being established in all parts of the country, taught in many cases by Chinese teachers who have prepared themselves for their work by training in Europe, America, or Japan.

Now, these people who have so suddenly awakened out of their sleep of centuries have a home which is rich in agricultural and mineral resources, and they are an energetic, hard-working race, quite capable, under efficient guidance, of making the best of their natural advantages. Moreover, their country produces commodities which cannot be readily produced or exist only in limited quantities in other countries, so that the Chinese have the means for building up a thriving world-wide trade. Let us first make a rapid survey of the position and character of the land from a physical point of view.

The more useful part of China, known as China Proper, is the south-eastern portion, which has an extended coast-line on the North Pacific Ocean. Mark how the country forms what the military men would call a "salient," that is to say, how it projects into the ocean and so obtains a longer coast-line, which is greatly to its advantage for commerce. The country is crossed by several ranges of mountains between which flow great rivers, of which the largest are the Yellow River, the Yang-tse-kiang, and

the Si-kiang These streams have many winding tributaries, and there are numerous canals, so that, on the whole, communication by water is fairly easy.



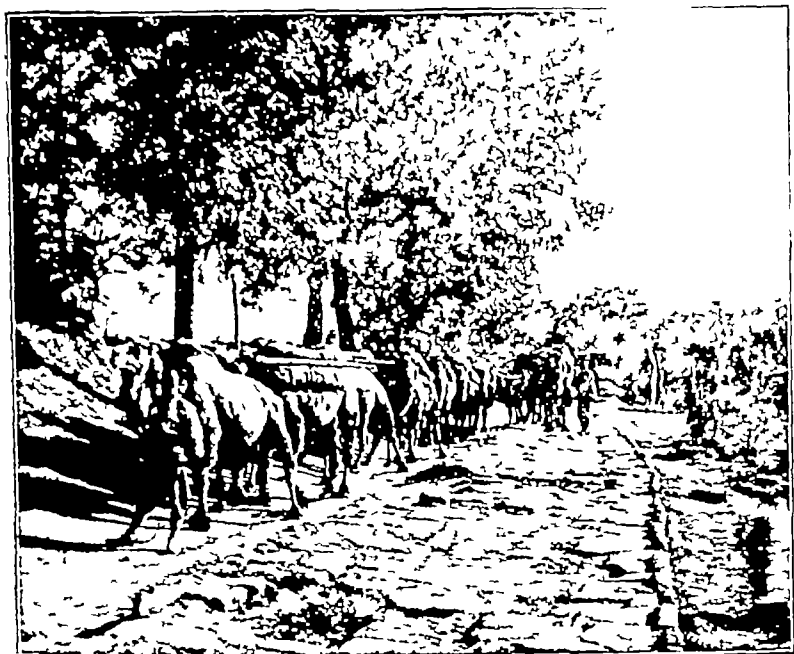
CHINA COMMUNICATIONS

Roads are few and bad though much used for internal trade, while railways and telegraphs are being rapidly extended

China is before all else an agricultural country

and a land of peasant-farmers, who do their work in a very antiquated manner. There was a time when the world's supply of tea came almost entirely from the southern and western provinces of China, but the competition of Assam and Ceylon has made a great change in this respect. China, however, still exports large quantities of tea to Europe and America, and as the product of this country is preferred for its flavour to that of India by many tea-drinkers, it is unlikely that the Chinese tea industry will die out. The greater part of the Chinese tea-crop, however, goes over the Trans-Siberian Railway to Russia, after being transported by road to the south of Lake Baikal. Britain now takes sixteen times as much tea from India and Ceylon as she does from China. India stands first among the world's producers of rice, but China makes a good second, most of the crop being raised in the southern provinces of China Proper. Rice needs a great deal of moisture, and will, in fact, only grow *in* water, and many of the rice "fields" consist of series of terraces up the hillsides into which water is conveyed from the rivers in the valleys below. In the broader open river plains there are wide flats, sometimes two miles in width, on which this very necessary grain is grown. Rice forms the chief food of the Chinese people, and, though a great deal is exported, the quantity is small compared with that produced in the country. Rich and poor alike are fed on rice, the former merely having more of this food than the latter.

Silkworms are reared in almost every part of the country. They are fed on the mulberry in the warmer south, and on the leaves of a kind of oak in the northern provinces. Raw and manufactured silk is exported largely to France and Italy, and a



A CAMEL CARAVAN PROCEEDING TO MONGOLIA FROM PEKING

This is one of the few paved roads of China—the camels are avoiding it.

great deal is collected in the port of Hong-Kong, whence it is shipped to Britain. Chinese weavers are very clever at producing fabrics of wonderful softness and colourings, and the shops of the Chinese towns make a fine display of these wares. At one time a great deal of opium was produced from the

opium poppy, and an enormous quantity was also imported from India, but native production and foreign import are gradually being stopped, to the great advantage of the Chinese people, who used to drink, chew, and smoke opium, to the great detriment of their health and morals

In the colder northern provinces cereals are grown, and wheat is produced in such large quantities that a great deal can be exported. The Chinese are also very expert gardeners, the careful, patient work required for the cultivation of the finer fruits suiting their quiet, peaceful temperament, and the quantity of fruit raised is very great indeed. The basin of the middle and lower Yang-tse-kiang (the latter part of this compound word means simply "river") is suitable for the growth of cotton, and both sugar and indigo can also be grown in this region. China has a climate in which cotton is very useful, but the home-manufactured cotton does not nearly suffice for her needs, and Britain pays her tea bill largely with cotton yarn and cotton piece-goods.

China is one of the first coal countries of the world, but her supplies of this mineral in the basin of the Yang-tse and elsewhere have as yet only been worked to a limited extent, and coal is imported from Japan and through Hong-Kong from Britain. Iron-ore is also abundant in many parts of the country, and is worked sufficiently to allow for export, chiefly to Japan. There are petroleum wells in the upper Yang-tse basin, and rich copper deposits in the south-

west But by far the most important mineral is tin, which comes from the same quarter, and is sent down in large quantities to Hong-Kong, whence it is distributed to foreign countries The export of tin is steadily increasing, for it is a very useful mineral in Western countries, and one which is not commonly found to any great extent in the European territories of the Great Powers

The factory system of production of manufactured goods is extending in China under the changed conditions of life, and cotton, woollen, and silk mills are being erected in Canton, Shanghai, and elsewhere, but a great deal of Chinese manufacturing work is still carried on in the homes of the people, on simple spinning and weaving contrivances which have ministered to the needs of the population for numerous generations The quiet workers of China have a great deal of artistic taste, which is shown not only in their textile work, but also in their fine china and porcelain, carvings in ivory and wood, lacquer-work, and beautiful embroideries An interesting industry is the manufacture of straw braid for making hats, and this material figures as one of the leading exports of the country

Britain has by far the largest share of the seaborne trade of China, Japan making a good second Most of the carrying trade along the coast, and even on the inland rivers, is conducted in vessels belonging to British owners Before the war a great deal of this trade was passing into the hands of the Germans



All internal water-ways are open to foreign vessels. British enterprise is evident not only in the carrying trade of the country, but also in the railway construction, as well as the mining and manufacturing industries.

## II

The populations of Chinese towns are matters of "estimate", for though the Chinese official would tell you that he takes a census, the meaning given to this term is not the same as with us. The towns of which we know most are the "treaty ports" which have been thrown open to commerce after certain wars in which we have engaged with China, and we have led the way<sup>1</sup> in making them known to the world of the West. There are ten of these towns, with a population of more than half a million, and the capital is Peking in the north of China Proper, though it is not the most populous nor the best situated for purposes of commerce. It stands in a sandy plain, and is shut in by a high wall with many gates, outside of which lie small straggling suburbs. An English traveller thus describes his impressions of the city:

"When a stranger has entered by a gate of the Northern City and rides or drives along the cross-wall to its Central Gate, he is greatly impressed by the magnificence of the walls and towers, and readily

<sup>1</sup> It is worth remembering that there are only about 11 000 British in the whole of China, 7000 Americans, 2700 French, and 2200 Portuguese. There are about 154 000 Japanese and 144 000 Russians.

believes that Peking is the grandest city of the world



*(Phot. Lind and Co.)*

CHINESE NOBLES UNDER THE EMPIRE

Such was the feeling of the writer when he entered it

After he had passed through the gate there stretched before him, as far as his eye could reach, a street about 200 feet across, lined with what seemed to be brilliant shops on each side, with wide spaces for foot-passengers, and between them a carriage-way raised about two feet on which a constant stream of vehicles, with horses, mules, camels, and donkeys, was hurrying. But by and by this impression of the magnificence of the city was displaced by another of the dilapidation and decay, squalor and filth, which everywhere obtruded themselves."

Peking is full of memories of past ages, and is packed with temples, villas, and Government offices, but the days of the Emperors are apparently ended, and a new spirit is abroad which it is hoped will sweep away some of the misery, poverty, and filth of the city, and take full advantage of the situation of Peking on two of the great trade-routes into Asia.

The port of Peking is Tientsin, which lies about eighty miles away and about thirty miles from the mouth of the Pei-ho River. The river near this crowded city is frozen over during the winter months, when business is carried on by means of sledges instead of the innumerable boats and junks which are used in the summer-time. The port is connected by rail with Peking, and is to be joined up also with Shanghai. This great port lies near the outlet of the Yang-tse basin, and has many foreign settlements of traders, who live in a quarter of their own. This foreign quarter, which is near the river, has all the appearance

of a busy European town, with well-made and electric-



[Pis Under]

THE CENTRAL MARKET PEKING

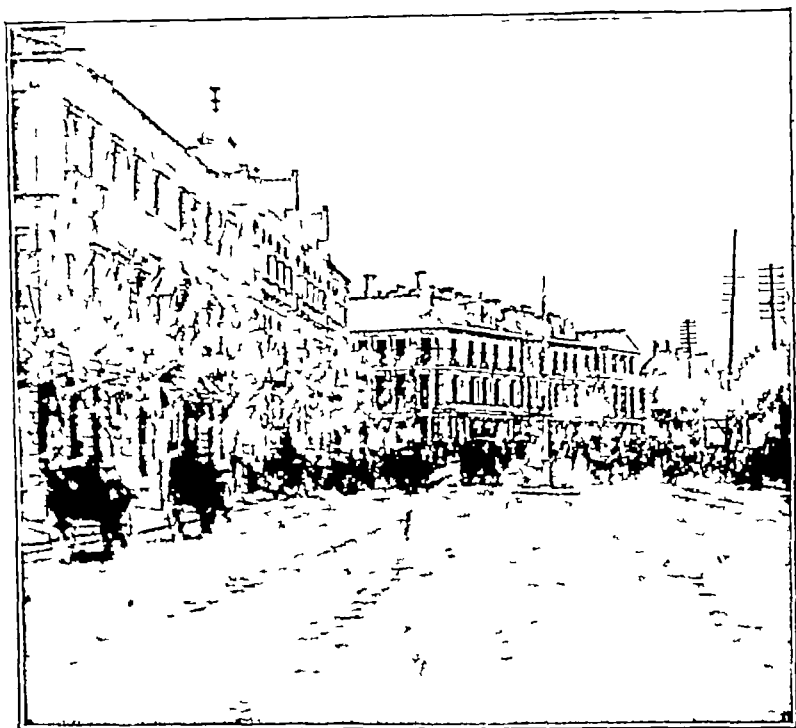
lighted streets, tramways, imposing blocks of offices,

churches, hospitals, schools, theatres, and newspaper offices. The native city, surrounded by walls, with narrow and dirty streets, was at one time noted for its cotton industry and for its unhealthy character. Cotton and silk factories of an up-to-date kind are now being erected.

Canton, at the mouth of the Canton River, is the chief port in Southern China. It is a walled city with twelve gates, which are shut and guarded at night, and narrow crooked streets above which watch-towers are set, from which night-watchmen proclaim the hours and sound fire alarms, which are very often required. It is full of temples, priests, and nuns, and has a great Examination Hall, which has nearly 9000 cells in which the candidates used to be kept until they had finished their tests.<sup>1</sup> The river is full of boats, more than half of which are dwelling-houses. The city has a fine harbour, and owing to its geographical position has developed an immense trade, the chief exports being tea, silk, and sugar. Four-fifths of the vessels which visit the port are British.

About half way between Shanghai and Canton is Fuchow (*i.e.* the Happy Region), a walled city lying in a beautiful and fertile plain about thirty-four miles from the mouth of the river Min, and in the centre of a rich tea-growing district. There is an arsenal and a navy yard, as well as a mint busily engaged in issuing modern money, which is rapidly becoming current throughout the country. Another important

commercial centre is Hankau, about 600 miles from the mouth of the Yang-tse and in the heart of the busiest and most prosperous part of the country. Its streets are narrow, crooked, and dirty, and crowded with creaking heavily-laden wheelbarrows



SHANGHAI—THE BUND

This is the European quarter adjoining the quay. The native quarter is very different.

bringing in goods of all kinds for distribution and transshipment to the coast. The foreign settlement is, however, well built and well kept, and the largest ocean steamers, mostly British, can reach the city, where they are unloaded at great hulks moored off

the river-bank. The actual moving of the goods is done by the numerous small boats which are such a characteristic feature of all Chinese river-mouths and harbours. Hankau is one of the principal points on the great trunk railway which is designed to link up Peking with Canton.

We must not forget our own island of Hong-Kong, which lies off the south-east coast and about seventy-five miles south-east of Canton. It is a rocky island with steep and precipitous shores, and on the north coast lies the port of Victoria, which contains the Government buildings and the great business houses and warehouses stretching along the water-front or perched in terrace-like rows on the steep hillsides. The streets are well built and well kept, lighted by gas and electricity, and the city has an excellent water-supply. The chief method of getting about is by jinrikisha and sedan chair, though there is now a tramway and an inclined plane for ascending the hill.

There is a very spacious, busy harbour full of boats and shipping, and the population seems to contain people drawn from every quarter of the globe. The city does enormous distributing and transport trade.

As an example of an up-country town we select Chengtu, which is thus described by a British traveller.<sup>1</sup>

“Chengtu is one of the most important cities in

<sup>1</sup> T. Logan Jack, in *The Back Blocks of China*. Edward Arnold.

China Its wall, 30 or 40 feet high, and wide enough on top for a company of soldiers to march abreast, surrounded by a dry moat given over to cultivation, encloses an area of about twelve square miles The population is estimated by the Chinese at 1,000,000 The main streets are broad, well paved with flags, and almost free from the odours so characteristic of Chinese towns Many of them are roofed with matting Some of the shops have really rich stocks of merchandise, including silks, furs, silver wares, jewellery, and arms, with perhaps still greater wealth in coal, salt, and white wax A few foreign commodities, such as kerosene, cottons, condensed milk, and glassware, can also be purchased Among public buildings the temples are the most conspicuous The enormous examination hall probably comes next Club-houses abound, and in large enclosed spaces within the wall innumerable yamens, tenanted by officials and rich merchants, are embowered in foliage The arsenal employs 600 hands, contains some fine machinery, and turns out Hotchkiss guns and Martini rifles, as well as matchlocks and culverins Its steam-whistle was the most home-like sound we heard "

## MEXICO AND CENTRAL AMERICA

WE are not accustomed to regard Mexico and Central America as among the progressive parts of the globe, and their backward state is largely due to the legacy



of bad government left to this part of the world by the Spaniards, who were masters here for several generations. The countries were peopled largely by Spaniards, who mixed with the native races to a great extent, and who became accustomed to a lawless state of life, which in modern times has not been shaken off. This has been a region of continual revolution and more or less violent changes of government, and one in which the constant state of unrest has proved very inconvenient for the United States. The policy of this great country has been to endeavour to keep the peace in Mexico, and, while unwilling to intervene by force of arms, she has for many years been very busy in the country in other ways. American money has been freely invested in Mexican property, and used to develop the resources of the country. Let us find out wherein the chief wealth of this land consists.

In the very heart of the country there are valuable petroleum-wells, which are mostly owned by United States proprietors. Farther to the south copper-mines have been developed, and coal-mines along the lower course of the Rio Grande as well as in several other districts of the interior. Silver and gold are also extensively mined. These minerals alone arouse our interest in Mexico, for they are all increasingly necessary in the life of civilized nations. The ports of Vera Cruz and Tampico on the shore of the Gulf of Mexico are the principal gateways of

export for these and other products of the republic, and from these two towns railways run into the interior linking up the mining and pastoral centres



POPOCATEPETL VOLCANO MEXICO

*[A. to Underwood]*

with Mexico City as well as with New Orleans, Galveston, and other towns near the southern boundary of the United States. But all these railways are owned almost entirely by foreign bondholders

Of course, there is a Mexican population, consisting largely of the "peons" or peasantry, mostly of Mexican-Indian descent, who are engaged in farming and cattle-rearing. These people are miserably poor, as people must always be who live in a land of insecure government. Yet Mexico has natural advantages which might be developed to the great enrichment of a contented nation. The country is very varied in surface, rising gradually from the low-lying coast regions to a great height in the centre. Consequently, there could be raised within this small area the products of the tropics, sub-tropics, and temperate zones, for at each elevation the soil is exceedingly productive.

There are great tracts of fertile land at present lying fallow, enormous pastures only partially used and forests capable of supplying the crying needs of many treeless regions in Europe, including our own, with abundance of excellent timber. At present the crops raised consist of maize, cotton, sugar, henequen (a kind of hemp used chiefly in the United States for making string to bind sheaves in harvest-time), wheat, coffee, and beans, but the soil has only been scratched. There are on the pastures large numbers of cattle, horses, mules, asses, sheep, goats, and pigs, but these too might be greatly increased in numbers. Mexico is capable of becoming a great meat-producing country for Western Europe, to which it lies much nearer than the South American republics, which at present supply food-stuffs in great

abundance to Britain and neighbouring countries. The United States has by far the greatest share in Mexican trade, and is followed, though at a great distance, by the United Kingdom

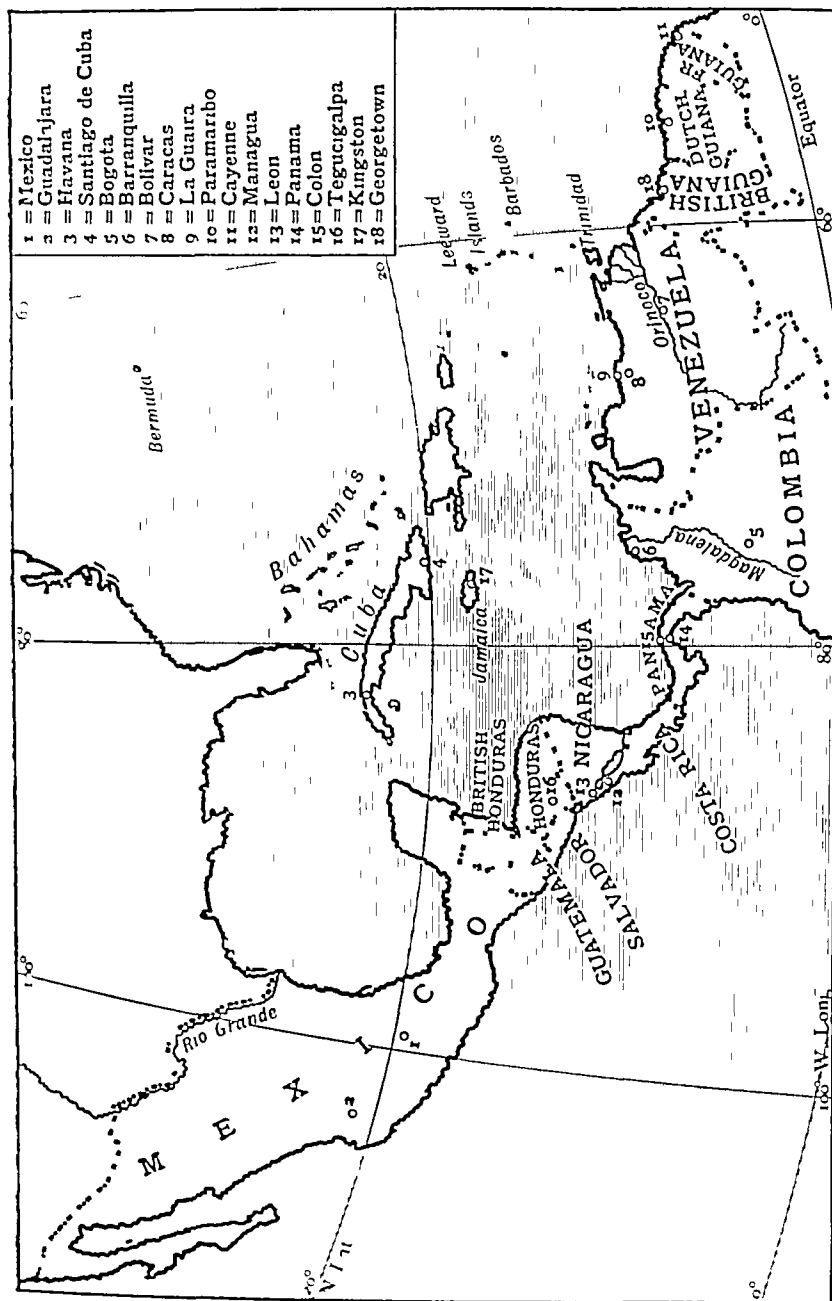
Mexico City, in the heart of the republic, stands in a valley which is more than 7000 feet above sea-level, and contains nearly half a million people. The city enjoys a temperate climate, and has an abundant water-supply. It is surrounded by high mountain chains which are broken by easy passes. About sixty miles to the south-east lies Puebla, which has busy cotton and woollen mills run by water-power, as well as large iron foundries. San Louis in Potosi is an important mining centre. The leading port on the Pacific coast is Acapulco, which has a splendid harbour and will doubtless become a most important commercial centre now that the Panama Canal has been opened.

Central America is a tropical region subject to earthquakes and containing many great volcanoes, especially in Guatemala and Salvador. There is a very heavy rainfall, and in the forest and jungle of the coast lowlands there are extensive swamps which make the country very unhealthy. But this unhealthiness *can* be counteracted, as the medical men of the United States proved conclusively when they conquered malaria and yellow fever as a necessary preliminary to the construction of the Panama Canal. The region is divided into Guatemala, Nicaragua, Honduras, British Honduras, Salvador,

Costa Rica, and Panama. They are all republics, with the exception of British Honduras, which is a Crown Colony of the British Empire.

The largest of the Central American republics is Nicaragua, which produces coffee and exports it very largely to France and Germany in ordinary times. Cotton is also raised and sent out chiefly to the United Kingdom. It was at one time proposed to take advantage of the San Juan River and Lake Nicaragua to make the water passage connecting the Atlantic and the Pacific, but an American company which undertook the work in 1885 failed to accomplish its purpose. Leon is the chief centre of activity, and Corinto on the Pacific coast is its port.

The second largest of the republics is Guatemala, and it produces a large number of very useful things which can only be got from a tropical soil, including cocoa, bananas, maize, sugar, coffee, cotton, cochineal, indigo, logwood, mahogany, rubber, and vanilla. Guatemala is another city at a lofty elevation surrounded by a ring of high mountain-peaks, and makes large numbers of cigars, as well as cottons and muslins. It is joined up by rail with San José on the Pacific seaboard. The republic of Honduras specialises in minerals and fruit, about two-fifths of its export trade being concerned with bananas, which leave Puerto Cortes in millions of bunches every year. On the other side of the Gulf of Honduras is the British colony which is known in America as Belize, after the name of its chief town.



Emery Walker 54

# CENTRAL AMERICA

and river and port This British Crown Colony exports mahogany and logwood, and might export cane sugar in large quantities The small republic of Salvador on the Pacific coast has similar products to those of the other Central American states

The people of Costa Rica have the reputation of being the most go-ahead, industrious, and prosperous of Central America The coffee of this country is famous for its fine quality There are rich plantations of rubber, tobacco, sugar-cane, rice, cocoa, and bananas in the low-lying parts, but the capital, San José, enjoys perpetual spring Forests of valuable tropical timbers cover a large part of the country, and there are two busy ports, Punta Arenas on the Pacific and Port Limon on the Atlantic, which are connected by a railway The republic of Panama has similar products, and is now of special interest to the whole of the modern world owing to the opening of the Panama Canal, of which we are to read in our next chapter

## THE PANAMA CANAL

SIR WAITER RAILEIGH is said to have expressed the opinion that the nation which controls the Isthmus of Darien will become the master of the world The United States now controls this narrow neck of land between North and South America, and though that country has no desire to become the "master of the world"—a phrase whose folly history has demon-

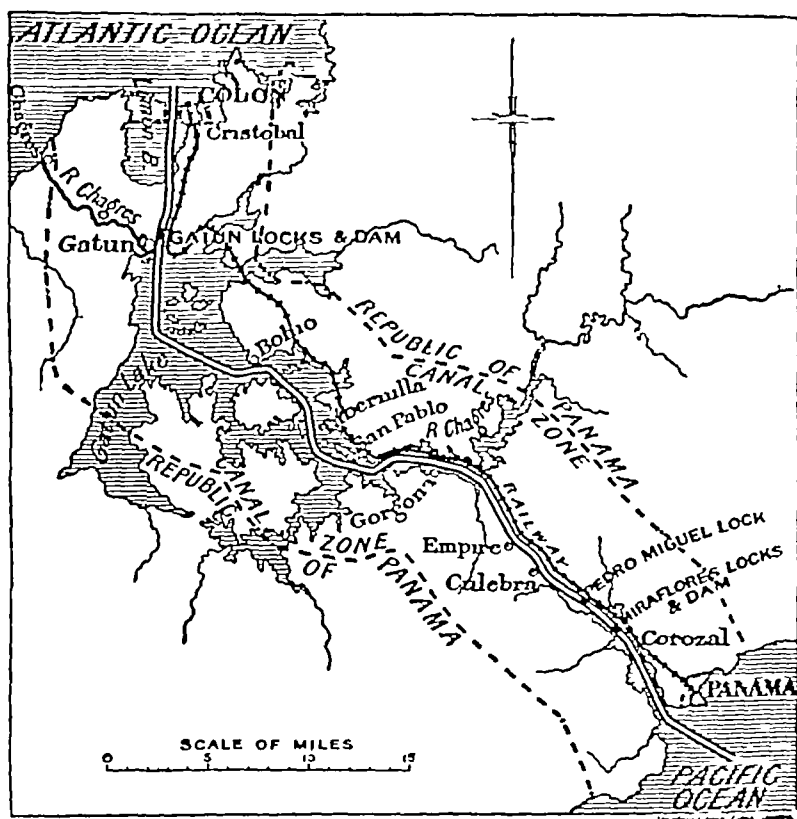
strated again and again—she expects very great things from the commercial water-way which her engineers have cut across this isthmus, and which is known as the Panama Canal

As soon as the Spaniards had established themselves in Central America, the Darien Isthmus naturally became a place of meeting, where goods from Europe were landed for the Spanish colonists, and the "richest spoils of Mexico" were piled up for transshipment to Spain, and a highway was built across the isthmus from Panama on the Pacific side to Porto Bello on the Caribbean shore. It was not long before plans were proposed and discussed for cutting through the isthmus—such an idea would of course suggest itself to the least imaginative mind—but Spain was never an engineering country, and, besides, she was too busy with other matters, such as the persecution of heretics and the contest with the island nation to which we belong. After the defeat of the Spanish Armada she gradually became of less and less account, not only in Central America but in Europe, where she had once taken a foremost place.

The new American nation was not directly concerned with Panama until she extended her energies beyond the Rocky Mountains, and states were set up on the Pacific seaboard, and the Isthmus of Darien became a well-used path when gold was discovered in California in 1849. The gold-seekers made their way to the new "Eldorado" across this



narrow path at first partly by boat and partly by means of mules, while a few years later a railway was built. Engineers now began to discuss the cutting of a canal more seriously, but it was not until



THE PANAMA CANAL

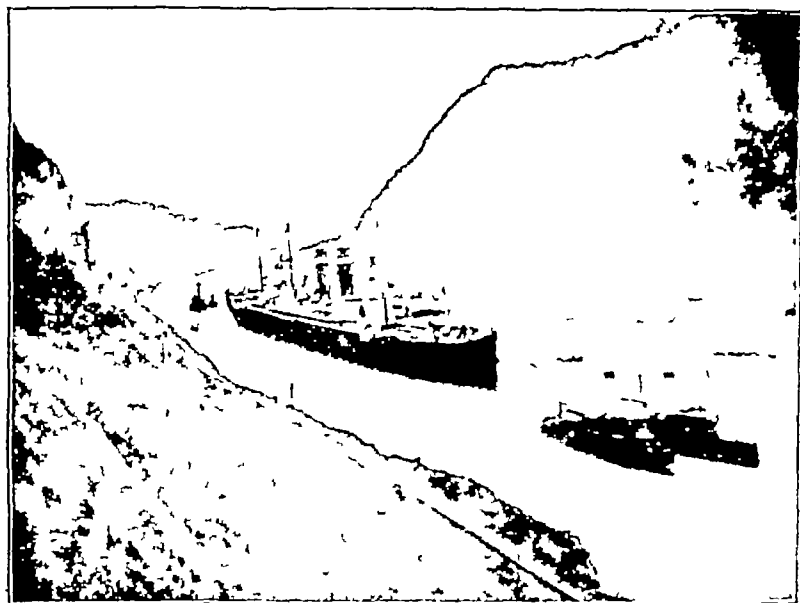
1876 that concessions were made by the Government of Columbia, at that time the leading state in the region, for the making of such a waterway. The promoters were French capitalists, and they entrusted the engineering work to Count Ferdinand d'

Lesseps, who had cut the Suez Canal a few years before Work was begun and carried on for eight years, and then the company failed Meanwhile another company of Americans had begun work on a rival canal through Nicaragua, and had also come to financial grief

A few years later, the United States Government came to the rescue and bought out the French company They also leased from the new republic of Panama a strip of land known as the Canal Zone, paying a large sum of money down and giving an undertaking for the subsequent payment of a yearly "rent" This was in 1904, and work was begun at once, the first great task being to fight with the fever and other tropical diseases which had baffled the previous attempts to cut the Canal and to put the Canal Zone into a thoroughly sanitary condition When these matters had been attended to, at enormous monetary cost, the cutting of the waterway and the making of the locks and dams were begun, the work taking about ten years to complete

The amount of rock to be excavated was enormous, the hardest part of the cutting being through the Culebra, which forms the mountain backbone of the isthmus and extends for about nine miles A small map of North America does not show, however, that the engineers could take some advantage of the Gatun Lake and the Miraflores Lake, which lie across the isthmus, though a deep channel had to be cut across these two lakes, while their height above ocean

level necessitated the building of locks at Gatun and Miraflores. The distance from ocean to ocean by the complete waterway is 50.5 miles from Panama on the Pacific to Colon on the Atlantic. The real importance of the Canal cannot be estimated for a considerable time. An enthusiastic American writer



(Courtesy of R. V. S. C.)

CULEBRA CUT PANAMA CANAL.

says "When the Suez Canal was opened by Ferdinand de Lesseps in 1869, Europe discovered Asia. When the Panama Canal was finished in 1914, America discovered the western half of its own continent, rearranged the world's trade routes, and shifted the dividing line of commerce thousands of miles westward to the Pacific, the future highway of the

maritime nations Under the new order of things, the centre of the world will ultimately be, not the Atlantic but the Pacific By the same token the New World and not the Old will be the backbone of the commercial system of the future " Another writer balances this opinion by saying "The Panama Canal will not bring any port in Asia or Asiatic islands nearer to any European port Only those in New Zealand, and some in Siberia, will be brought nearer Liverpool, and that by an insignificant amount "

The truth will probably fall between these two extreme opinions, but the effect upon trade and freights in the United States itself is bound to be very great The Canal will bring San Francisco nearly 8000 miles nearer to New York than it was before, and nearly 9000 miles nearer to New Orleans, while the sea distance between Tacoma, Portland, and Los Angeles and the Atlantic ports will be correspondingly decreased Of course, these ocean ports are now in communication by rail, but we must not forget that the cost of water transport is about one-sixth of that by land

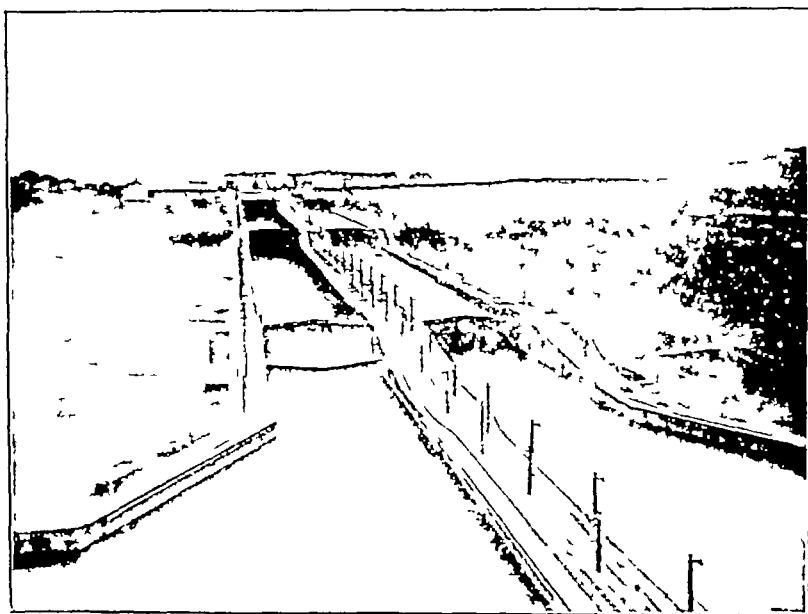
The emigrant from Liverpool, or Hamburg, or Havre will be able to find his way to the Western States by sea instead of being obliged to cross the continent by rail This will mean reduced emigrant fares, but loss of business on the part of the eastern centres through which these emigrants used to pass, and of the trans-continental lines which used to carry them and one of the effects of the opening of the

Panama Canal will doubtless be reduction of railway freights and increase of locomotive speed, which means the building of larger engines. For a long time before the opening of the Canal the directors of the Canadian Pacific Railway and of the United States trans-continental lines were thinking out the problem of how to meet the competition of the new waterway. Of course, we must beware of thinking of the Panama Canal as a broad, free, open highway. Like the Suez Canal, it is a mere narrow ditch through which vessels must be very carefully conducted, and in some parts hauled by electric power, which is liable to get out of repair, and in the Culebra portion is subject to landslides, in which there is bound to be a certain amount of delay in passage proportionate to the use which is made of it, and for the use of which canal dues must, of course, be paid.

The nearest great American port to the Canal is New Orleans, which is the main outlet for the produce of the great basin of the Mississippi River as well as an import centre for the same wide region. The effect of the opening of the Panama Canal on the trade of this busy port will doubtless be very great. She will get her own goods cheaper and will do a great deal of transfer trade from ocean steamers to river boats and rail. It is worth noting that though New Orleans is the nearest American port to Colon, the British port of Kingston in Jamaica is only half as far away.

New York is rather less than 2000 miles from the

entrance to the Panama Canal, and the trade of the American commercial capital will be greatly increased not only with the Pacific coast of the United States but also with the Pacific ports of the South American republics, of which Valparaiso is the chief. The



*[Photography by J. H. M. S. P. Co.]*

#### GATUN LOCKS PANAMA CANAL

In the distance looking south Gatun Lake is seen

time spent in a business transaction between these two centres will be about halved, and the benefit will not only be to New York but to the twelve South and Central American states from Mexico to Chile. The abandonment of the stormy and tedious passage through the Straits of Magellan, whenever possible, seems likely to affect in the opposite way the trade of

the eastern ports of South America, namely Bahia, Rio de Janeiro, and Montevideo, but trade has a habit of adjusting itself, and so long as a port is the outlet of a productive hinterland it will find its traders and its routes whether the way be long or short. A study of the world-map will also show the advantage offered by the Panama Canal to trade between the eastern ports of the United States and those of Japan, China, and Farther India.

We have already considered, to some extent, the probable effect of the opening of the Panama Canal upon British Empire routes and communications. The new conditions will, on the whole, be probably as beneficial to Britain and her colonies as to the United States, and the leading shipbuilding and trading country in the world will assuredly not be backward in new developments where the possession of the ships is one of the chief factors of success.

## THE SOUTH AMERICAN CONTINENT

THE European nations have taken possession of most of the best parts of the world, and have established their power in all the seas, but only three of them have any footing in the South American continent. Britain holds British Guiana in the north as a Crown Colony, and draws from this territory supplies of Demerara sugar, molasses, rum, tropical timber, and

gold There is also a Dutch and a French Guiana, in which the products are somewhat similar But the rest of the continent is divided into ten independent republics in which a large number of Europeans are living and working, but without having "taken possession" of any territories for their own countries There is to be no "scramble" for South America as there has been for Africa—not, at least, if the United States can help it, for her "Monroe doctrine" lays it down as a principle that she will steadfastly resist any attempt to secure further territory in the American continent on the part of a European Power <sup>1</sup>

A glance at the map of this continent shows us that about two-thirds of its area lies within the tropics According to the way of thinking of the modern white man, this fact has a double significance It means that this region will not provide homes for large numbers of white people, and it also means that it will provide commodities which white people are finding more and more useful in modern life, if

<sup>1</sup> Naturally enough there is a strong feeling in America against the constant quarrels among European nations as the following incident will show In 1903 the South American republics of Chile and Argentina having settled by arbitration a long-standing frontier controversy which threatened to involve the two countries in war mutually bound themselves by treaty to reduce their naval and military armaments and for a stated period to submit every matter of dispute arising between them to arbitration Upon one of the highest boundary ranges of the Andes the two nations have erected a colossal bronze statue of Christ as the sacred guardian of the peace to which they are pledged The statue was unveiled in 1904 and bears the inscription "Sooner shall these mountains crumble into dust than Argentines and Chileans break the peace which at the feet of Christ the Redeemer they have sworn to maintain"



not, indeed, indispensable. The latitude of South America is, however, not a perfect guide to its climate, for there is a city called Quito, in the republic of Ecuador, which enjoys perpetual spring. For elevation above the sea enters into the matter, and we must make some inquiry into the general physical aspect of the continent if we are to understand its suitability as a home for large numbers of the human race.

South America has much the same general shape as North America, but a reference to the latitude will remind us of the vivid contrast between the broad northern parts of the two continents. For the northern part of North America is a frozen, trackless region, while the corresponding part of South America lies within the tropics, and the equator crosses the northern portion of the extensive basin of the great Amazon River. The southern continent narrows towards the colder south, but Cape Horn does not come so near the South Pole as the northernmost lands of South America come to the North Pole. The narrowest portion of South America has a cold, blustering winter, but the conditions are not nearly so severe as in the wastes of Northern Canada.

The Andes range of South America resembles that of the Rocky Mountains in forming a kind of westerly backbone to the continent. Both ranges run north and south, both are volcanic, and both cut off the Atlantic rains from the districts lying immediately to the west of them. But the Andes

form a more closely continuous range, and make a more complete barrier between the broad east and



PASS IN THE ANDES

(H. S. Berry Co. Tour)

Note the limestone mountain with talus (or rock waste) at the foot of the slopes

the narrow west, while their average height is greater, and they contain a larger number of lofty peaks. Several Andine peaks and volcanoes stand more

than 20,000 feet above the level of the sea. The volcanoes of South America are also more active than those of the northern continent. In the central part of the Andes is the lofty Plateau of Bolivia, round which are many of the highest peaks.

In the broad eastern region of the continent there are alternate highlands and lowlands, the latter drained by the great rivers known as the Orinoco, Amazon, San Francisco, Parana, and Uruguay. The Amazon is the third longest river in the world, and flows eastward through broad plains, covered with dense jungle and tropical forests, known as selvas. The level lands of the Orinoco basin are called llanos, while those in the south of the continent are known as pampas. Of these the most important to the civilised world are the grassy pampas, which provide excellent natural pasture and are capable of producing cultivated grasses and of raising large crops of grain. They are, moreover, in the more temperate region of the continent, where white people can live in comfort. On the whole, if we wish to keep a correct idea of relative values we must begin our review of the South American republics in this lowland region, whose products contribute very largely to our own national larder.

The map on p. 295 shows very clearly the position of the temperate grass-lands which produce large quantities of wheat, which has become the most important cereal in the modern world. It will be seen that matters are now so arranged with regard to lati-



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# NATURAL REGIONS OF SOUTH AMERICA

tude that there is throughout the world a continual succession of wheat crops to supply the never-ending demands of each season of the year. When the autumn crops of the northern hemisphere are used up, the great wheat-lands of the southern hemisphere give in their contribution to the world's supply of the "staff of life," while modern methods of transport have made collection and distribution comparatively easy. Among the important wheat-lands of the world are those of the Argentine Republic, in the southern portion of South America, and a great deal of the grain and flour from this country finds its way to our own land. As Argentina also supplies us with a great deal of meat, it will be seen that of the ten South American republics this is the most important from the British point of view, and for this reason we give it first consideration in our review of the states of the South American continent, though a glance at the map will show you that Argentina is not the largest of the republics.

### *The Republic of Argentina*

Near the Andes there are foothills and a few unimportant hilly or mountainous districts between these ranges and the Atlantic coast, but for the rest the Argentine Republic consists of the vast plains known as pampas. In the northern region, known as the Chaco, there are dense forests, but most of the pampas are open, treeless pastures covered with

fine grass varied by patches of large thistles and other coarse growths. In the Patagonian region there are wide desert districts covered with boulders and shingle, in which occur occasional clumps of thorny brushwood, and in the hollows here and there ponds or lakes of salt water.

The middle portion of the country has an equable, temperate, and healthy climate, though the coast districts are subject to the high winds known as *pamperos*. Over these far-reaching plains roam great herds of wild cattle and horses, the descendants of stock imported by Spaniards of past generations, but the area of organised pasturage is being rapidly extended, and the range of the wild animals is being correspondingly reduced. The herdsmen of the plains are the *Gauchos*, who are mainly of Indian descent, and they are very clever in their management of the cattle and horses. The exports of the country consist largely of live animals and animal products, such as hides, skins, wool, horns, and hoofs.

The various European countries have sent "colonies" into this promising country, each of which retains its own national customs and uses its own methods of cultivation. The first of these national groups came from Switzerland in 1856, and since that time many others have followed their example, including Italians, Russians, Rumanian Jews, Boers, Germans, and others. Most of the farms are cultivated by their owners, as free land has been abundant and the method of acquiring it

very easy. Labourers are well paid, often with a liberal share of the crop, as well as a house and food for the bread-winner and his family. The chief crop is wheat, but a great deal of maize, flax, barley, oats, potatoes, and tobacco is grown and largely exported. The money of Great Britain has been the most powerful agent in the development of Argentina, and this country has, naturally enough, the greatest share of the foreign trade of the republic, the United States coming next, followed by France and Belgium.

Buenos Ayres is the great port of the republic, and about half of the exports from this busy town consists of live animals and animal products, such as salted beef, chilled beef, mutton, tallow, ox-hides, sheepskins, and wool. The city has a spacious port protected from the Atlantic storms, and in its crowded, bustling streets may be met people of almost all nations of the earth, though the common speech is Spanish. Many railway lines radiate from this port to all parts of the wide plains round about the Plate River, which are sending down to the coast more and more wheat for shipment across the Atlantic to Western Europe.

### *The Republics of Uruguay and Paraguay*

To the north of the broad opening known as the Rio de la Plata, or Plate River, lies the small republic of Uruguay. This country contains broad pastures

specially suited to the breeding of cattle, sheep, horses, mules, goats, and pigs, and nearly all the exports of any value from Montevideo, the capital, are animal products, the most valuable being wool and the second in value hides and skins. Uruguay also sends out a great deal of meat-extract, as well as tinned meats, and especially ox-tongues. Beef, dried in the sun, is exported to Brazil, and another interesting export, destined for Europe, is bone-ash, which is largely used as a fertiliser. The herdsmen of Uruguay are the Gauchos, a race of South American natives, but the chief work of the country has very largely passed into the hands of European settlers, among whom the Italians and the Spanish are the most numerous. Large numbers of people of these nationalities come to this country every year.

In the basin of the streams which unite to form the Parana lies the republic of Paraguay, which is another grazing country supporting large herds of cattle and exporting animal products similar to those of Argentina and Uruguay. In the forests of this country grows a tree from which *Yerba maté*, or Paraguay tea, is prepared, and this is exported in very large quantities. The climate of this country is warm enough for the growth of tobacco, and before the War a great deal was exported, chiefly to Germany. The forests also provide a large amount of useful timber, which is sent out to the towns in the surrounding republics. The farm-work is of a





There are wide stretches of land under orange trees, and this valuable fruit stands high among the exports which are sent, largely by river, from Asuncion down to the coast. There is a railway service between Asuncion and Buenos Ayres, but ships of large draught can reach the "port" of Paraguay. The roads of the country are, in general, mere bullock-tracks, and transport away from the railway is difficult and costly. There are no direct imports from this country into Britain, but one-fourth of the imports, chiefly clothing, comes from British ports. The population, of about four-fifths of a million, consists largely of Indians and African negroes, with a mixed company of Europeans, mostly Spaniards and Germans, but very few British.

### *The Republic of Chile*

The republic of Chile is a long and narrow strip of territory lying between the inner ridge of the Andes and the Pacific Ocean. Through the whole length of the country runs the outer ridge of the great mountain chain, and between the two ridges there is a central valley or tableland, drained by numerous rivers, which in the north are mostly shallow and useless, and in the south are only navigable for a short distance. A number of islands lying off the coast are included in Chile, two of the most interesting being the Juan Fernandez islands, on one of which a Scottish buccaneer, named Alexander

Selkirk, lived all alone from 1704 to 1709. The account of his lonely life on this island is said to have suggested to Daniel Defoe his famous story of *Robinson Crusoe*.

In the northern provinces of Chile there is very little rain, and the chief industry is mining, including the extraction from the soil of saltpetre, which is largely used in the making of gunpowder. Saltpetre is also known as nitre or nitrate of potash, and, besides being used in the manufacture of explosives, it is used as a medicine, and in many chemical processes. Nitrate of soda also occurs abundantly on the surface of the soil of this country, and is largely used as a fertiliser, enormous quantities being shipped to Europe and the United States for the use of the farmer.

In the central and southern provinces there is a more plentiful and regular rainfall, and the cultivation of the soil is the chief industry, wheat, barley, and grapes being raised in considerable quantities. Large herds of cattle graze in the valleys. Many of the people own their small holdings and produce what is sufficient for their personal needs, but wheat is grown in quantities which allow for export, though the farms on which this grain is grown are largely in the hands of foreigners.

The capital of Chile is Santiago, which is situated in the central part of the country, and the chief outlet for the chemical and mineral products is Valparaiso, one of the busiest towns on the South

Pacific sea-board, which will become much busier owing to the opening of the Panama Canal. Santiago is to be connected by rail with Buenos Ayres, by way of the Uspallata Pass, which the line will cross at an elevation of nearly 10,000 feet above sea-level, passing through a tunnel more than six miles in length. This line of about 880 miles will then take its place as part of the route from England to Australia. There is, of course, railway connection between Santiago and Valparaiso, and a great deal of road traffic with Argentina by way of the passes through the Andes.

### *The Republic of Peru*

This country has three climatic regions, namely hot lowlands capable of growing tropical products such as sugar and cotton, a semi-tropical region at a higher altitude in which coffee and maize can be raised, and a still higher region with a temperate climate. The greater part of the population, however, live in the lowlands, where sugar is raised, as well as coffee and cotton. The higher lands produce a good deal of quinine got from the bark of the cinchona tree, and cocaine obtained from the coca shrub, and send down to the sea-coast large quantities of the wool of the alpaca, llama, and vicuna. Guano, the dung of sea-birds, is collected from islands off the coast and is exported for use as manure. Lima is the capital and largest city, and is connected by rail with its port Callao.

*The Republic of Brazil*

The largest of the South American republics is



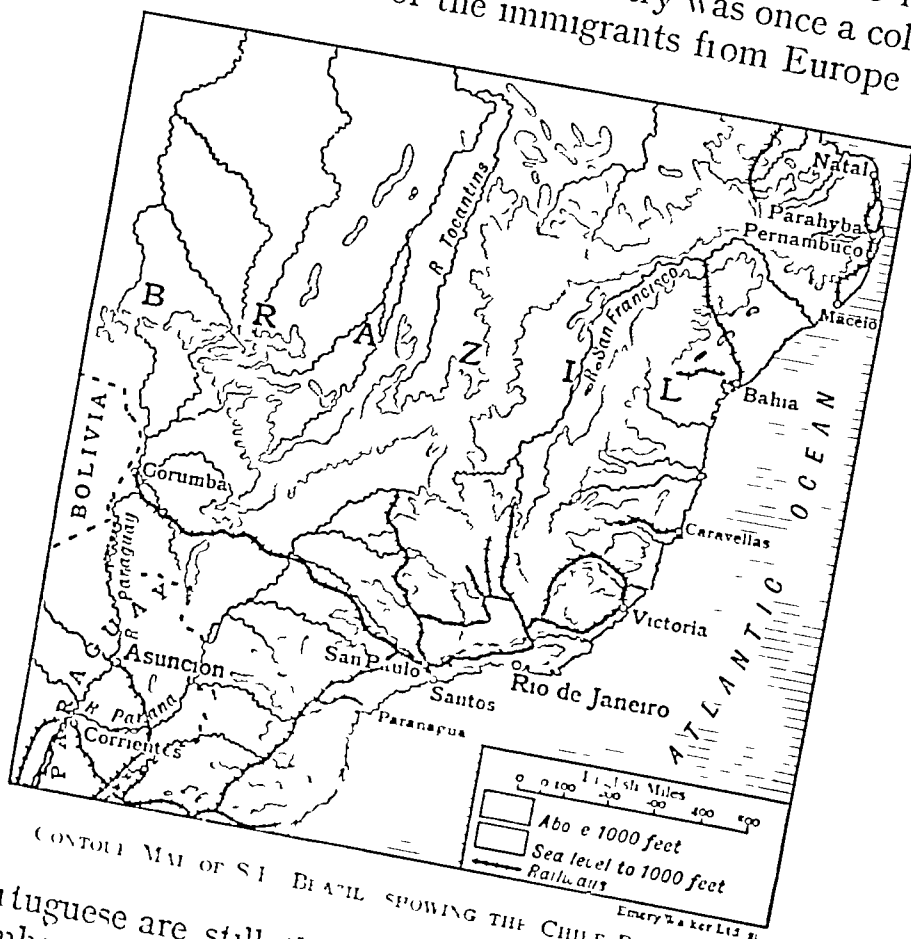
PLANTING SUGAR CANE ON IRRIGATED PLAIN SANTA CLARA PERU

Brazil, which has an area equal to that of the continent of Europe, omitting Spain and Portugal, but a

# COMMERCIAL STUDIES

305

population about three times that of London, living for the most part near the coast, and in the most southerly provinces. The country was once a colony of Portugal, and of the immigrants from Europe the



CONTOUR MAP OF SOUTH AMERICA SHOWING THE CHIEF RAILWAYS

Portuguese are still the most numerous. But large numbers of Spaniards and Italians also make their homes in this country, and there are in the southern provinces prosperous colonies of Germans, Russians,

and Italians The language of the country is Portuguese

Brazil produces about four-fifths of the world's supply of coffee, and a great part of the rubber This statement shows in a few words the nature of the chief world-activity of the country The products next in order of value are sugar, tobacco, cotton, timber, cocoa, and nuts, all of great and increasing use in modern life The republic has, however, not yet given much of her timber wealth to other countries, and her forest resources are enormous Nor has she worked to any great extent the rich stores of minerals which are to be found within her borders, and which include coal, gold, diamonds, and petroleum, as well as smaller quantities of copper, mica, and platinum

Brazil is still suffering from the bad methods of her Portuguese masters, who rigidly closed the colony to foreigners, checked the industries by giving sole rights of production to certain favoured planters, imposed heavy taxes and farmed out their collection to dishonest, extortionate men, made the law of the land a matter for mockery, forbade printing, refused to build roads or schools, and generally did all they could to render the country an unfit place for self-respecting people to live in Such methods of so-called government are not only bad for the people who are obliged to suffer them in their own persons, they affect also the descendants of these people, who, when liberty is offered to them, require to be patiently

taught for generations before they are able to make a worthy use of it

Brazil nuts, which every one has seen in our shops, are the seeds of a very beautiful tree which grows to a height of 100 to 120 feet. The seed-vessel of this tree is almost as large as a man's head, and contains about thirty of the seeds or nuts. These seeds contain a great deal of oil, which can be extracted and used for burning in lamps. From the forests of this country a dark-red timber known as Brazil-wood is obtained, and is exported as a dye-wood. The dye is obtained by soaking the wood, and is used for making reds and browns for the dyer and calico-printer, as well as in the manufacture of red ink.

The capital of Brazil is Rio de Janeiro, which stands on the west side of one of the most magnificent harbours in the world, forming an inlet of the Atlantic Ocean. The city and its suburbs stretch for about ten miles along the shore, climbing up the numerous irregular eminences and dipping into the little green valleys between them, whilst great mountain ranges shut in the background. The city has no architectural beauties, but its natural situation and the view from the lofty cone of Corcovado, about three miles away, are without parallel in the world. Rio, as the city is familiarly spoken of, is not only the governing but also the commercial capital, and does by far the largest part of the trade of the republic. It was a Portuguese captain who, four hundred years ago,



discovered the bay, and, thinking it to be the mouth of a large river, called it Rio de Janeiro—that is, January river, from the name of the month of his arrival

### *The Republic of Bolivia*

Bolivia is a mountainous country about six times the size of the United Kingdom, with a total population about equal to that of Paris, half of whom are Indians, while only one out of eight is of European blood. The world-value of this country lies in the fact that it produces about one-fourth of the total output of tin, coming next to the Malay Peninsula in the production of this valuable and useful mineral. Silver and copper are also largely mined and exported, though their value is exceeded by that of rubber, which ranks as the second export. These facts explain the presence of the white population in this country.

Agriculture is in a very backward condition in Bolivia, and many of the departments into which the country is divided are so dry that irrigation must be carried out by means of artesian wells. The cereals, which are raised by very primitive methods, are about sufficient for the needs of the population, but a certain amount of coffee and cocoa is exported to Chile and Argentina. On the upland pastures, however, a large number of animals are fed, and these include sheep, cattle, horses, mules, asses, and goats,



MARKET SQUARE QUITO ECUADOR

as well as llamas, alpacas, and vicunas. The llama is an animal rather like a camel, but smaller, humpless, and woolly-haired, used largely as a beast of burden in the mountain-lands. The alpaca and the vicuna are of a similar character, and both furnish a great deal of fine wool for the making of cloth.

### *The Republic of Ecuador*

The northern part of Ecuador is crossed by the equator, which has given its name to the province. The country is divided into two parts—the coast regions and the lower river-valleys, where tropical farming is carried on, and the hill-country, including the foothills and the high mountain-valleys, which are adapted to grazing, dairying, and the production of hay, grain, and the fruits and vegetables of temperate climates. The chief product of the country is cocoa, which is mostly grown near the coast, the largest plantation company being of British composition.

### *The Republics of Colombia and Venezuela*

These two countries have hot lowlands which produce cotton, sugar-cane, and cocoa, a semi-tropical region at a higher level in which coffee and corn are grown, and a still higher temperate region in which wheat and other cereals are cultivated, and goats, cattle, and sheep are raised. Rubber is

cultivated, and is also obtained from the forests of the lowlands

Venezuela is, next to Brazil, the greatest coffee country of the world. Its capital is Caracas. Colombia also grows and exports coffee, and mines almost the whole of the world's supply of emeralds. The capital is Bogota.

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<i>Argentine</i>	<i>France—continued</i>	<i>Spain</i>
Wheat	Motor-cars, cycles, and parts	Iron ore
Beef	Wine	Oranges
Maize		<i>Sweden</i>
Mutton	<i>Germany</i> (before the war)	Timber and wooden articles
<i>Austria-Hungary</i>	Sugar, refined and unrefined	Butter
Sugar	Iron and steel	<i>Switzerland</i>
<i>Belgium</i>	<i>Netherlands</i>	Silk
Zinc	Margarine	Embroidery
Woollen yarn	Sugar	<i>United States</i>
Flax	<i>Rumania</i>	Raw cotton
<i>Brazil</i>	Maize	Wheat
Rubber	<i>Russia</i>	Bacon
<i>Denmark</i>	Wheat	Wheatmeal and flour
Butter	Timber	Lard
Bacon	Butter	Leather
<i>France</i>	Eggs	Tobacco
Silk		Maize
Woollen stuffs		

## BRITISH COUNTRIES

<i>Australia</i>	<i>Canada</i>	<i>New Zealand</i>
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Wheat (occasional)	Cheese	Mutton
Butter	Timber	<i>South Africa</i>
Mutton	<i>Ceylon</i>	Wool
<i>British India</i>	Tea	<i>Straits Settlements</i>
Wheat (occasional)	<i>Egypt</i>	Tin
Tea	Raw Cotton	Rubber
Jute	Oil Seeds	

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Iron, steel, and machinery	Coal	Coal
Cotton piece goods	Cotton yarn	<i>Russia</i>
Coal	Woollen yarn	Machinery
<i>Belgium</i>	Herrings	Coal and coke
Machinery	Machinery	Herrings
Iron and steel	Iron and steel	<i>Spain</i>
Cotton piece-goods	<i>Italy</i>	Coal
<i>Brazil</i>	Coal	<i>Sweden</i>
Cotton piece goods	Machinery	Coal
Coal	<i>Japan</i>	<i>Switzerland</i>
<i>Chile</i>	Iron and steel	Cotton piece goods
Cotton piece goods	Machinery	<i>Turkey</i>
<i>China</i>	Cotton piece goods	Cotton piece goods
Cotton piece goods	<i>Java</i>	<i>United States</i>
<i>Denmark</i>	Cotton piece goods	Linen piece goods
Coal	<i>Netherlands</i>	Iron and steel
<i>France</i>	Cotton yarn	Cotton piece goods
Coal	Coal	Woollen piece goods
Machinery	Iron and steel	
Woollen goods		

## BRITISH COUNTRIES

<i>Australia</i>	<i>British India—contd</i>	<i>New Zealand</i>
Iron steel and hardware	Machinery	Iron, steel and hardware
Cotton piece goods	Cotton yarn	<i>South Africa</i>
Machinery	<i>Ceylon</i>	Clothing
Woollen piece goods	Woollen piece goods	<i>Straits Settlements</i>
<i>British India</i>	Iron, steel, and hardware	Cotton piece goods
Cotton piece goods	Cotton piece goods	<i>West Africa</i>
Iron, steel and hardware	<i>Egypt</i>	Cotton piece-goods
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